

184819





LIBRARY GENERAL FUNDS

Luther S. Bent
Binding Fund
William T. Carter
Catalogue Endowment
Louis A. Duhring
W. V. & J. M. Keating
Henry Leffman

Library Endowment
Morris Longstreth
Phila. Med. Society
Charles H. Vinton
Douglas Stockton Warren
J. William White
Caspar Wistar

Bdg. 2.70

COLLEGE OF PHYSICIA

OF PHILADELPHIA



Digitized by the Internet Archive in 2017 with funding from The National Endowment for the Humanities and the Arcadia Fund

https://archive.org/details/southdakotajourn7195sout





* MEDICINE and PHARMACY *

PUBLISHED MONTHLY BY THE SOUTH DAKOTA STATE MEDICAL ASSOCIATION

THE SOUTH DAKOTA PHARMACEUTICAL ASSOCIATION

JANUARY ★ 1954



COLLEGE OF PHYSICIALS
OF PHILADELPHIA

SURITALSODIUM

ULTRASHORT-ACTING INTRAVENOUS ANESTHETIC

SURITAL sodium (thiamylal sodium, Parke-Davis) produces smooth anesthesia with rapid, quiet induction and prompt, pleasant recovery.

Detailed information on SURITAL sodium will be mailed you on request.



FATHER TIME PRESENTS THE MEDICAL PROFESSION WITH A PROBLEM*

Roy C. Knowles, M.D., Sioux Falls, S. D.

This report is presented to the Medical Society of the Seventh District through the courtesy of the staff of the Minnehaha County Mental Health Center who cooperated with the author in assembling and preparing the material. We give this material to you fully recognizing that the problem presented to the state of South Dakota by the ever-growing aged population is but one of several social, economic and political problems facing this state. Indeed, it is our opinion that the problem of the aged should be considered only as the whole picture is surveyed. Ultimately, answers must be obtained concerning the care and education of the retarded child and adult; the care, education and rehabilitation of the crippled and handicapped; special education and treatment facilities for the emotionally disturbed child; more adequate education for the normal child throughout the state; improved care of the state hospitalized psychiatric patient; improved care of the chronically ill; improvement of the institutions of higher learning in the state; improved prison, reformatory and training school facilities with emphasis on rehabilitation, and constantly improved brands of hybrid corn. This last is not placed in there so much for sarcasm as in realistic recognition that this is an agricultural state and the finances for providing

*Paper to Seventh District Medical Society, Sioux Falls, December 1, 1953.

the improved care and improved facilities implied by the above statement does depend on the success of agriculture in this state. By the same token we are thereby recognizing the need to view the state as a whole and thus provide the best facilities most economically. You will note that we do not include in the above list of needs, improved medical care on a general level. We do not know whether this is needed. Also not included in the above is increased out-patient psychiatric facilities throughout the state. This we do know is needed.

It has been said that any physician who would declare himself a specialist in geriatrics would starve. This is because it is difficult for anyone to accept that he is old. Thus most of the patients who are 65 and over would continue to go to the physician who treats the young and vigorous. Not only is the patient in this way afflicted by his own desires for a more permanent hold on youth and life but also the physician is so afflicted. It appears that because people are frightened of old age, particularly as a prospect for themselves, they ignore the problems of old age.

There is the additional problem in this country that the United States is still relatively young. Our whole history is based on the vigor, force and productiveness of youth. Our whole economy is based on the concept

that only the young and strong can produce enough to justify their existance. Because it has been accepted that only the youth should be in the driver's seat, the aged in this country have been fairly easily pushed aside.

Societies and civilizations past and present have accepted the problem of the aged in a variety of ways. We all know of the veneration of the elderly by the Chinese. We also know the dangers which are attached to veneration and adherence to those things which are old to the exclusion of those things which are new. At the other pole of attitude toward the elderly is that of the Labrador eskimo who quietly disposes of his old folks or of the Northwestern eskimo who expects his old folks to go on a long walk in a snow storm and become lost or of the Hottentot who builds a small hut for his elderly parents. places therein a small quantity of food and then moves on. In the United States we merely ignore old people.

While we are ignoring old folks, medical science continues it's battle against death and continues to prolong life so that the absolute number as well as the relative number of elderly people increases steadily. More and more we find it necessary to work hard at the job of ignoring the problem of the aged. The aged are becoming so numerous and such an economic burden that it is very difficult to continue to ignore them. Then too, our Judeo-Christian tradition causes us to feel guilty, as much for acts omitted as for acts committed. Thus we find ourselves in a position of being forced to recognize there is a problem and forced to try to do something about it.

Just how much of a problem is this of the growing aged population? Fortunately for this study, South Dakota is almost exactly representative of the average American population so far as age is concerned. In 1950 the number of people 65 or older per 100 population for the whole United States was 8.4; in South Dakota the figure was 8.5. Using these figures one quickly comes to recognize that in South Dakota there are approximately 54,000 men and women of 65 and older. In Minnehaha County the figure falls just short of 6,000 and in Sioux Falls there are approximately 4,300 people 65 years of age or older. According to statistics from the United States Bureau of Vital Statistics these figures should change within the next twenty years to 64,000 in the state, 7,200 in the county and 6,000 in the city. Thus we are forced by sheer numbers alone to admit that the aging population presents to us a problem.

How can we best define this problem? For our purposes let us restrict our defining boundaries to the philosophical, economic, political and medical ones. Let us at this same time add a different kind of definition — that of old age itself. For purposes of our paper as is usually accepted in medical papers, old age is defined as beginning at age 65. We would also distinguish between old age and senility. For our purposes, senility has the additional characteristic that the mental processes of the individual have obviously deteriorated to a degree which renders him less capable of functioning than is normal.

Our social conscience forces those of us who are yet young to recognize an obligation to a large segment of our population who are forced to suffer because of our attitudes toward age. We cannot continue to ignore the problem of the aged and thus we must develop some kind of social philosophy concerning them. There appear to be three roads for us to take. The lowest road is that of exterminating the aged. A road which is not much higher than the first is that of relegating the aged to a life of slow disintegration in years of uselessness and degradation. The third and highest road appears to be that of providing the aged with that which is justly his own. He should be honored for that which he has been able to produce. He should be given the opportunity to offer to his society the benefits of his long years of experience. He should be given the opportunity of rehabilitation to the point of ultimate usefulness if infirmities have come with his age. And when infirmities do completely overtake him, he should be granted the right to a dignified existance and a right to graceful preparation for death. We who are young owe these things, not only to those who are already old, but we owe them also to ourselves when it is our turn to become old.

Economically, we find an ever-growing problem concerning the aged. Considering the fact that the young and healthy and vigorous must already support by their labors the very young and unproductive, considering

that they too must help support many other peoples than those of the Americas, one can quickly recognize what the burden of having one-tenth of the population beyond working age can mean. It must prove expensive to South Dakota to have one-tenth to onetwelfth of the population non-productive. It must prove expensive to South Dakota to support 54,000 to 60,000 elderly nonproductive people. It is probably true psychologically that we can train people to accept that with old age they will sit back and live out their years on pensions. Our present population has not yet fully accepted this as the ultimate goal of their lives, but suppose they should. We can add to this discussion of definitions the third, that of the political one. Imagine the political strength of onetenth of the population if they were to vote for ever-increasing old age benefit. Imagine the political potential of an even larger portion of the electorate if we were so to train our people as to expect old age benefits. Many who are now in their fifties in anticipation of what will happen to them when they reach their sixties could be expected to join with the group already 65 and vote themselves into a state of terminal luxury. Suppose we merely accept there will be a continuation of the old American approach to life that a man should earn his own salt. Suppose we accept therefore that elderly people will not attempt to vote themselves into grander and grander Townsend Plans. This still leaves us with the overwhelming job of providing economically for a dormant group or people equal to one-tenth of the population. We find that we have the possibility of a whole new industry, that of the care of the aged. Is it possible for business to consider using the knowledge and skill of the aged to run this business of caring for the aged? Thus the infirm and incapacitated among the aged could be cared for by those who are not infirm or incapacitated. This, of course, would not take up the whole slack but would provide at least one source of continued occupation for the elderly person. Beyond this we must consider more and more education to the populus as a whole to help them see the futility and foolishness of relegating the aged person to an unproductive seat simply because he has reached the age of 65. It is well known that people do not age equally chronologically. It is also well known

that mental capacities do not diminish in proportion to age. Physical capacities may diminish thusly, but the mental do not. Thus the business man may be as acute and keen at seventy as he was at fifty. His skill and experience added to his keeness should logically force us to accept his continuation as a worker.

The medical aspects of this problem of the aged are complex but they are not impossibly complex. Starting from the acute general hospital let us attempt to put together what might be an ideal chain of facilities for caring for the aged.

In the aged population as well as in the youthful there are acute medical problems. These should, of course, be taken care of in the acute hospital with all of its medical and laboratory facilities. The acute problems in the aged need not necessarily take more time nor more hospital bed space than similar problems among the youthful. In our particular civilization age appears to be synonomous with ever-increasing percentages of chronic illness. (This kind of complementation of chronic illness and old age may be but an artifact. Few pathologists have ever described an autopsy in which a person had died simply of old age. It is to be assumed that people can die of old age but so far there is some intercurrent or accident which causes the demise. Some people working in this field estimate that man may some day live to be 110, 120 or even 150. The intriguing idea is that some day it may be possible for people to "merely fade away" instead of die of some disease.) Whether the parenthetical statement has any merit or not does not change the present fact that chronic disease is more prevalent among the aged. It is therefore imperative that acute hospitals have connected with them and under their supervision a ward, wards or a separate hospital building for the chronically ill. The economic feasibility of this plan has been proven by many hospitals, notably Montefiore and the Springfield Massachusetts General. Such a plan permits of the use of the acute beds by acute problems. The chronic patients both young and old can be taken care of in the near vicinity of a hospital, thus having available to them all the medical care necessary. Nursing services and other attendent services can be more inexpensively provided than if the chronic patient is crowded among the acute beds in the hospital. With the chronic patients thus housed together it is possible for social work, occupational therapy and physiotherapy as well as recreation therapy to be provided to the chronic patient in economical doses leading ultimately to his rehabilitation in an acceptable percentage of cases.

According to governmental statistics it is suggested that general hospital acute beds be provided for in a community in a ratio of four beds per 1000 population. This would allow for approximately 280 acute beds in Sioux Falls for Minnehaha County. Chronic beds are to be provided at the rate of 2 per 1000 population. This would equal approximately 140 chronic beds for Minnehaha County. The total of these two make it imperative that Sioux Falls have for it's present population a total of 420 beds. If it is estimated that Sioux Falls draws from a population surrounding Minnehaha County sufficient to make a total drawing population of 100,000, the total required beds for this area would be 600. This does not allow for future population increases.

Beyond the chronic hospital there are still other services which remain under the care of the acute hospital in the ideal situation. Slowly acute hospitals are taking upon themselves the task of providing home care for patients not needing hospital beds. This home care can be provided in the home of the patient, in a foster home or in a nursing home. The hospital counts these beds as part of their total patient population. They provide coverage to these patients through the social service department of the hospital. The most important and most successful example of this kind of service is that of Montefiore.

The next step in provision of care for the aged is that of caring for the senile or otherwise demented elderly person. This care is best provided in a psychiatric hospital on a state level. For a state the size of South Dakota one such hospital is sufficient. There is no need for other such facilities and the additional expense of running more than one such facility is indefensible. In certain larger states the provision of more than one such facility is defensible for either of two reasons. One reason is the total population of the state makes it impossible for one such institution to provide care for all such patients without

becoming unwieldy in size. The other defensible reason is that small units for the care of psychotic elderly patients may be provided in a general psychiatric facility attached to a general hospital used for teaching and training purposes. There is little excuse for this state or any other state to continue the many times proven fallacy of splitting state institutions into small portions and scattering them here and there among the state communities for political reasons. Human beings are not cattle, pigs or corn. Their misfortunes and ill health are not political footballs to be passed from geographical position to geographical position in order to gain some political advantage. The care of the aged and senile and the sick is truly an economic problem but it is first and foremost a humanitarian problem which calls for our very best efforts in finding an answer. A rural state of small population like South Dakota must face certain of its problems with humility and wisdom. The wisdom must show itself economically. It must also show itself in the choice of staff and other personnel entrusted with the care of the sick, the aged and the handicapped. The humility must show itself in the simple recognition that professional staff can be obtained to work only in a community of large enough size to be culturally and educationally stimulating. It is therefore imperative that South Dakota not spread the care of it's aged and senile all over the state.

That other organizations or institutions than the medical ones recognize the benefits to be derived from having humanitarian and social and medical institutions in concentrated groups was revealed in the bulletin of Augustana College, published in July-August, 1953. In the announcement of the beginning of new courses for nursing education and for deaf education there are the two following statements. "Sioux Falls is one of the few cities where both a college and a school for the deaf are located which creates an ideal situation for facilities"; concerning the nursing education "The students are able to participate in college activities because of the convenient location of the college and hospital." Neither of these two courses would be feasible, nor fully beneficial, were the persons involved unfortunate enough to have the various institutions scattered in the various communities. It is therefore concluded from all of this that the care of the senile and otherwise emotionally disturbed aged person should be concentrated in the state hospital which has adequate facilities for such at present. The savings to be derived from not having to build additional hospital facilities could then be diverted to the hiring of sufficient capable staff to do the job for which the state hospital is intended.

The final step in this whole problem includes the care of those aged people who are unable to provide for themselves economically, but who are not psychotic nor chronically ill. It is in this field that the American people have done the least and it is toward these particular individuals that the American people have paid the least attention, yet, they make up the largest group of the aged.

These elderly people are permitted to live in insecurity surrounded by hostility. They themselves are hostile because they feel they have been shelved when they could continue to be useful. The young people upon whom they must live as parasites feel hostile toward them because of their constant sapping of the family economic and emotional strength. These people become moody, depressed, irritable and unbending. Unfortunately this accumulation of personality and behavior traits has come to be considered synonomous with old age. Many psychologists and psychiatrists feel that the ugly picture of old age thus painted is far from true. The elderly who are able to live in an environment which wants them and in which they can feel useful are not inflexible, irritable, depressed and contankerous. I am sure that all of you know among your acquaintances elderly people who have grown old very gracefully indeed. These people are among those who have continued to find themselves useful in the world and not a burden to themselves or to other people. Thus in a rather negative way we have pointed out a philosophical approach to the work of handling the elderly. The job ahead of us is to provide them with an environment in which they are wanted, in which they can continue to grow and produce, in which they can be economically secure and an environment in which they can develop and be developed for a fuller life and a more graceful preparation for death.

By the extension of the social service department of one of the existing agencies in

this community a certain percentage of these patients can be helped to a more mature and fruitful life in their own homes or in foster homes or in the present nursing homes. However, particularly in the latter situation the economic reason for which most nursing homes are started would probably work a handicap upon any kind of social activity or social work activity which might add additional expense to the maintenance and care of the patient. Instead of or in addition to the foregoing suggestion, it is suggested that there be provided in Sioux Falls a small colony or home for the aged. This would be a colony from 35 to 150 or more persons run as no nursing home facility or old age home is run in the state. At the present time nursing homes and homes for the aged are run as custodial institutions only. Private nursing homes have as their chief reason for existance the provision of an income for the person running the home. The private parochial homes for the aged do have the very important additional facility of a religious environment. The little colony proposed herein, according as monies are available for staff, would provide rehabilitation and training, employment, opportunities for religious living and recreation. The administration of such a colony would undertake through education of the surrounding community, to provide economic opportunities for the persons dwelling in the colony. There are very few such nursing homes or villages or facilities in the United States. The author of this report knows of one such personally. Such colonies are economically justified in the same way that schools for the blind and the deaf and the physically handicapped are justified. Any person who can be rehabilitated to partially or completely support himself economically is less of a drain on the community financially. It costs little to rehabilitate as compared with the cost of custodial care. The cost of running such a colony would be defrayed chiefly by charging the aged person or his family for his care. Experience has shown that a family is more satisfied if mom or dad is being taken care of in the best of all available places at some expense to the family. The expense of running the colony would be further cut by employing many of the inhabitants of the colony in the tasks of running

This colony which has been thus suggested would be intimately connected with the local general hospitals set up as described above. For example it is suggested that when possible, McKennan or Sioux Valley Hospital provide a psychiatric unit of at least 20 beds, preferably 30, with 20 closed ward beds. The same hospital should, if possible, provide a unit for chronic patients. The over-all environmental management of the chronic section and psychiatric section could be run by the same personnel. Thus it would be possible to utilize occupational therapist, physiotherapist, recreational therapist, nurses, attendants and rehabilitation personnel in both units as well as in home care units. The colony for the aged could make use of this same hospital facility because it is easily recognized that from time to time an aging person may become confused, but not sufficiently disarranged mentally to necessitate state institutional care. A short period of treatment in a psychiatric unit with perhaps a later transfer to the chronic unit would make it possible for him then to be returned to the old age colony to continue the process toward rehabilitation and independence.

Tied together thus it is easy to see why this job becomes of paramount importance to the medical profession. First of all, the problem of the aged and the senile is a medical humanitarian problem. It is also an economic and political problem which bears sharply on each of us, both as we are approaching old age and as we enter it. Because of the medical aspects of this problem it is to be preferred that the medical profession be one of the leaders in providing the necessary care for the aged and senile. This should not be entirely a function of lay people. The medical profession if it does not actively take part in the formulating of the plans for this portion of the population must at least offer itself as authoritative consultative resource. It is further suggested that if this medical society accept the foregoing that it give permission to have this thinking passed on to the State Research Council as a studied suggestion to be considered in the presently progressing survey. We must take great care that the present survey lead us ultimately forward and not terminate with this state providing facilities which from the day of their opening might be twenty years behind time. We must not let it

happen that someday you and I might do as we can today do at most of our state institutions — look at the buildings and say, "What beautiful buildings and grounds" and then shamefacedly turn away because we dare not look at what is inside of those buildings. We dare not accept as our own, the inhumanity expressed by the custodial attitude.

STATISTICAL INFORMATION

Approximate state population	650,000
Total population 21 years and over	401,000
Approximate number under 21	250,000
Approximate number 65 or older	54,000
Total too old or too young to be	
making a living	300,000
Over 21, but under 65	350,000

This is the total number of men and women who are within the economically productive age range and supporting approximately an equal number who are unable to support themselves.

Among the ones who are unable to support themselves there are additional breakdowns into groups such as this. Estimating one out of one hundred as retarded: State — 6,500, Minnehaha County — 700, and Sioux Falls — 520.

In the state hospital there are 1,700 inmates or patients. This is approximately 1 out of 382 of the total population. It would be accurate to estimate 183 of these are from Minnehaha County, 136 from Sioux Falls. Whereas according to the total population there is one patient in Yankton State Hospital for every 382 of population, among the aged the question is quite different. There are 645 people 65 years or older in Yankton. This is over 1/3 of the total patient population. This also accounts for one person of every 83 in the state who is over 65 years of age.

Also in the realm of special people there are approximately 135,000 school age children from kindergarten through high school in this state. I do not know how many college students there are enrolled in the state schools.

There are 84,000 people between the ages of 50 and 64 in the state.

BIBLIOGRAPHY

Community Services for Older People — the Chicago Plan, Wilcox and Follett Co., Chicago. (Prepared by the community project for the aged of the Welfare Council of Metropolitan Chicago. A Weibolt Foundation project)
Personal correspondence with N. W. Shock, M.D.,

Baltimore City Hospital, Baltimore 24, Maryland Section on Gerontology, Department of Health Education and Welfare of the Public Health Service.

The Governor's Conference on Mental Health, Sacramento, California, March 3, 4, 1949.

Kemp, H. A., Realism in Rehabilitation of Aged and Chronically Diseased.

Bluestone, E. M., Planning for Long Term Illness. J.A.M.A. 135, pages 343-347, October 11, 1947, "Planning for Chronically Ill."

Shindell, S., Method of Home Care for Prolonged Illness.

Mountin, J. W., Public Health and Aging. Kern, R. A., Problem of an Aging Population.

Lepak, J. A., Challenging Problems and Demands of Aged and Chronically Ill.

Bluestone, E. M., Place of a Long Term Patient in Modern Hospitals.

Bluestone, E. M., Chronic Has a Claim.

Ranck, M., Health Department and Nursing Homes. Smigal, J. C., Rehabilitation of Aged Chronic Invalids.

Federal Security Agency, "Chronic Illness," Public Health Bibliography Series #1.

Geriatrics, March-April, 1952.

Journal of Gerontology, October 1948.

Modern Hospital, May 1946.

Hospitals, February 1948.

Personal Correspondence with Raphael Ginsburg, M.D., Veterans Administration Hospital, Tomah, Wisconsin.

"The Negative Attitude Toward the Elderly,"

Raphael Ginsburg, M.D., Reprint from **Geriatrics**, September-October, 1952, Vol. VII, No. 5.

"Psychology in Everyday Geriatrics," Raphael Ginsburg, M.D., Reprint from **Geriatrics**, January-February, 1950, Vol. V, No. 1.

"Longevity Studies," Raphael Ginsburg and Willard C. Brinegar, M.D., Reprint.

"Psychiatric and Medical Aspects of a County Home Survey in Iowa," Raphael Ginsburg and Willard C. Brinegar, M.D., Reprint from **Journal** of American Geriatrics Society. Vol. I, No. 1, April, 1953

"The Aging and the Aged, Psychological and Social Aspects," Raphael Ginsburg, M.D., Reprint from Individual Psychology Bulletin, Vol. VIII, No. 3 and 4.

"Geriatrics and Gerontology in Everyday Practice," Raphael Ginsburg, M.D., Reprint from Individual Psychology Bulletin No. VII, First Quarter 1949

"A Program for Care of the Aging," Edna G. Davidson, South Dakota Journal of Medicine and Pharmacy, March, 1953.

"Therapeutic Aspects of Geriatric Medicine," W. B. Kountz, M.D., J.A.M.A., Vol. 153, No. 9, October 31, 1953.

"Geriatric Ward Psychiatry Techniques in the Psychological Management of Elderly Psychotics," Raphael Ginsburg, M.D., from the American Journal of Psychiatry, Vol. 110, No. 4, October, 1953. Personal Correspondence with Charles Yohe, M.D., Superintendent Yankton State Hospital, Yankton, South Dakota.

SIXTH INTERNATIONAL CANCER CONGRESS

The Sixth International Cancer Congress, organized by the International Union Against Cancer, will be held in Sao Paulo, Brazil from July 23 to 29, 1954.

The official subjects portion of the program was organized by the president, Professor Antonio Prudente, in collaboration with the program committee which includes scientists from all parts of the world.

Groupings of subject matter will be headed "Biology and Investigation," "Pathology," "Radio and Surgical Therapy," and "Social Fight." These will be broken down into specific discussions on "Differences Between Benign and Malignant Lesions," "Steroid Metabolism in Cancer," "Mutation and Cancer," "Nutrition and Cancer," "Carcinogenisis," "Histogenisis of Lymphatic System Tumors," "Mechanism of Production of Metastases," "Classification, Diagnosis and Treatment of Leukemias," "Chemotherapy of Cancer," "Radioactive Isotopes in Cancer Research," "Surgical Treatment of Gastric Cancer," "Treatment of Pharyngeal Cancer," "High Energy Irradiations in the Treatment of Cancer," "Treatment of Breast Cancer," "Treatment of Cancer of the Floor of the Mouth," "Therapy in Cancer of the Uterine Cervix," "Teaching of Cancer," "Cancer Detection," "Cancer in Children" and "The Problem of the Patient with Advanced Cancer."

Arrangements are being made for charter air flights to Brazil. Further information is available by writing:

American Cancer Society 47 Beaver Street New York 4, New York



DERMATITIS OF THE FEMALE HAND* Henry M. Lewis, M.D., Denver, Colorado

Hand dermatitis represents about ten percent of all cases seen in the dermatologist's office,1 and the majority of patients who suffer from this disorder are women. As a rule, the dermatologist sees the unusual or the chronic patient with dermatitis of the hand; recent and relatively uncomplicated cases are treated adequately in the office of the general practitioner, and it follows that the incidence of hand dermatitis in general practice is certainly greater than ten percent of all dermatologic patients. Although it is true that most women with hand dermatitis respond to simple avoidance and therapeutic measures, the disease is often a baffling problem associated with a disconcertingly high percentage of therapeutic failures. In order to reduce this failure rate, one must comprehend the synergistic interplay of the elemental etiologic agents involved, and be capable of setting up a therapeutic regime to overcome them.

Such dermatoses as erythema multiforme, psoriasis, herpes simplex, dermatophytids, scabies, and syphilis, which involve other areas of the skin as well as the hands, will not be considered in this discussion. Nor shall I further mention such rarities as epidermolysis bullosa, pustular psoriasis, porphyria, and keratoderma.

Predisposing Factors

What type of woman is prone to develop hand dermatitis? Assuming identical exposures, why will some women develop eruptions

*Presented at the General Session of the South Dakota State Medical Association, Rapid City, S. D. — June 15, 1953. and others remain free? What fertilizes the soil?

Heredity and constitution. We are all familiar with the light complexioned, blue eyed, thin skinned, sun-intolerant, blond female. These women are notable for their allergic inclinations and the susceptibility of their skins to innumerable endogenous and exogenous damaging agents.

Nervous stress. MacKenna² refers to the skin sensitive person as being of the obsessional type, intelligent, tense, restless, overconscientious, and preoccupied with cleanliness, routine, and order. Such a woman may suffer an increased outpouring of palmar sweat on an emotional basis, and if this is combined with plugging of the sweat duct orifices, the picture of dyshidrosis or pompholyx results. Dyshidrosis in turn diminishes the resistance of the cutaneous surface to household irritants and eventuates in the familiar picture of exudative neurodermatitis. An overwhelming nervous component in a susceptible woman precludes the necessity of any other causative factor in the production of neurodermatitis.

In addition, nervous stress intensifies the allergic propensity of the patient. Guy,³ in his excellent study of neurogenic factors in contact dermatitis of the guinea pig, demonstrated that a heightened sensitivity to known concentrations of allergenic substances could be correlated with fatigue, emotional stress, tension and other adverse conditions. Although these factors are difficult to assess in the human being, they cannot be overlooked, for clinical experience compels the conclusion

that mental turbulence greatly increases the cutaneous susceptibility to primary irritants and allergens alike.

Exciting Factors

Soap and water. Of all the external applications to the female skin, detergents and water are the most common. Sharlit4 has described the deleterious effects of soap and water on the skin succinctly and adequately. He says, "Soap must be used with water. Soap is a wetting agent encouraging the hydration of keratin (the horny protective surface of skin). The hydration of keratin reduces its elasticity. Further, keratin, bloodless and in immediate contact with the weather, suffers variations in temperature over a wide range and the colder the keratin, the less its elasticity. Keratin thus damaged will fracture when subjected to repeated tensions." The result of this chain of events is known to the layman as "chapping." It usually occurs on the dorsum of the hands over the knuckles, an area frequently wetted and under constant tension from flexing the fingers. The skin feels rough, appears dried out and is streaked with a myriad of tiny red lines. It is not difficult to understand that skin thus damaged by hydration can react more readily to exogenous

In a married woman, hand dermatitis frequently begins at the base of the ring finger. There is a space beneath the jewels of the wedding and engagement rings which accumulates soap, water, and household debris over a period of months. This area of skin remains wet when the remainder of the hand is dried. Constant friction of this wet mass against the skin produces irritation and provides a source from which the hand dermatitis spreads.

Sweat duct occlusion. I have mentioned sweat duct occlusion briefly in discussing the neurogenic factors in hand dermatitis. Its importance as an exciting agent in the production of this troublesome disorder is so great that one is justified in elaborating on this subject. When heat intolerance in soldiers during World War II prompted research into the physiopathology of the sweat gland apparatus, an entire new era of dermatologic thinking was laid open. The sweat duct, as it passes outward through the epidermis, has no cellular lining. Therefore, edema of the epidermis as a result of exogenous or endogen-

ous harmful agents, or hydration of the keratin, may produce poral closure and plugging of the distal portion of the sweat duct. The sweat gland continues to secrete, often at an increased rate if emotional tension is present. This produces distension and often rupture of the duct. Blister formation (vesiculation) follows and is accompanied by itching as the sweat, being unable to discharge onto the skin surface, escapes into the surrounding tissues. Many women with hand dermatitis will wear rubber gloves in order to protect their hands from soap and water. The physician is familiar with the increased sweating produced by the rubber glove and can readily comprehend that this protective device in contact with the skin serves only to aggravate, rather than benefit, the hand dermatitis.

Household chemicals. In her daily chores, the housewife comes in contact with innumerable injurious chemicals. Ammonia and bleaches, paint and paint products, utensil and wall cleansers, disinfectants, polishes, insect sprays and steel wool are but a few of these. Also, the hand with even a minimal dermatitis will not tolerate the irritating action of celery, tomato, or citrus fruits.

Contact dermatitis. A true allergic eczematous contact dermatitis is often the primary exciting agent in hand eczema and may exist independently of other causes in its production. The patient may become truly hypersensitive to metal utensils, rubber products, plastics of various types, houseplants, and insecticides. Chemicals applied to the skin in baby oils, hair tonics, hand lotions, and other medications may be culpable. Or such ordinary objects as thimbles, needles, playing cards, compacts, and wooden knife handles may be allergens to some women. Waldbott⁵ has attempted to construct basic hand dermatitis patterns as an aid in detecting contactual allergens, and his classification of hand patterns is helpful in seeking out the causative allergen. Many therapeutic agents, including antihistamine creams, have a high sensitizing index, and most of these cutaneous sensitizers have been introduced within the past fifteen years. It has been difficult indeed to keep abreast of the sensitizing potential of the innumberable so-called "specific" antiprurities and anti-eczematous chemicals. The employment of these agents may serve only to superimpose an allergic eczematous

contact dermatitis on a primary irritation from household chemicals.

Bacterial factors. In any chronic dermatitis, the normal saprophytic cutaneous flora may disappear and be replaced by pathogenic strains of staphylococci and streptococci which add an impetigenous overlay to the pre-existing disorder. If this infection is acute, it is identified and treated as such, but often its action is insidious and unrecognized. Allergic reactions to bacterial nucleoproteins and polysaccharides frequently occur. These substances may be partial antigens, but when combined with keratin acting as a hapten, a full antigen is formed and the picture becomes that of infectious eczematoid dermatitis. Should this complication develop, the eruption becomes ever more recalcitrant to therapy and may be prepetuated long after the instigating causal agent has disappeared.

Not only may bacteria prolong dermatitis by local infection and/or sentitization, but also distant infected foci may be instrumental in this respect. Occasionally, a stubborn hand dermatitis will respond to therapy only after removal of infected teeth, tonsils, or other foci.

Food allergy. Less often, food allergy may be an etiologic agent in dermatitis of the hand. Rowe⁶ states that about eight percent of hand dermatitis cases stem from ingested allergens and has written extensively on this problem. Sulzberger⁷ offers the thoughtprovoking hypothesis that ingested food allergens produce hand dermatitis through contact of the allergen with the epidermis when sweating occurs into, rather than onto, the skin. These food allergens would be excreted with the sweat under normal circumstances. Despite Rowe's apparent simplification of food allergen identification, in everyday practice the recognition of culpable ingested allergenic substances by means of equivocal, often misleading, scratch and intradermal tests is often a frustrating task.

Treatment

When confronted with this bewildering array of etiologic components, acting either singly or in various combinations, what constitutes to the physician a simple, practical, and effective therapeutic approach to the problem?

Most important is a detailed, painstaking, sequential history. Efforts are made to elicit

exposures to household chemicals, to nervous stress, to excessive use of soap and water, to applied medications and suspicious contactual allergens. The temporal exposure relationships of these agents to each other and to aggravation of the dermatitis should be correlated. Too often, however, the history is indefinite and clearly defined entities cannot be isolated. The woman, usually a housewife, is then given a detailed list of therapeutic instructions.

First, complete avoidance of soap and water is mandatory. The patient is requested to obtain six pairs of thin white cotton (pallbearer's) gloves and to turn them inside out at the time of purchase so that the seams will face outward and the smooth surface lie to the skin. She also obtains two or three pairs of thin rubber or plastic mitts. Emphasis is placed on the need for complete isolation of the involved hand areas from their normal environment. No soap or water, edibles, or potential sensitizers and irritants are to touch the affected skin for ten days. Whenever wetting of the hand or contact with these substances is contemplated, the cotton glove is drawn on with the plastic or rubber mitten over it. This outer glove should not contact the involved skin, and should be worn for short periods only, lest perspiration of the hand become too pronounced. Often the cotton glove is worn alone with the uninvolved glove fingers cut off; this acts as an effective bandage during routine household chores and facilitates handling small objects. Most women are quite willing to undergo the small degree of discomfort this procedure entails, for it is well justified by the results obtained.

I prescribe Domeboro (R) (Burow's solution) powders or tablets for most acute cases and recommend that one powder be dissolved in a pint of ordinary tap water, then six ice cubes added. The patient draws on a pair of cotton gloves and, using the glove now as a compressing material, immerses the hands in the prepared solution. The hands are immediately withdrawn and held over the surface of the solution so that evaporation may take place. In a minute, when the hands no longer feel cool, they are re-immersed and again removed. This process is continued for one half to one hour and is repeated three times daily. Potassium permanganate (1:6000)

or silver nitrate (1:400) may be employed for compresses if gross infection is present, but Burow's solution prepared fresh as described suffices for most cases.

After compressing, a thin film of the prescribed paste or lotion is applied. Three percent ichthyol in plain Lassar's paste may be used. Or one may find the time-honored "1-2-3" ointment preferable. This is composed of one part Burow's solution, two parts aquaphor, and three parts plain Lassar's paste. It is often advisable to combine a non-sensitizing antibiotic in the prescription; this may be done by substituting bacitracin, neomycin, or polymyxin ointment for the petrolatum of the Lassar's paste. These pastes are removed gently by warm mineral oil before recompressing, but the patient cautioned that if the salve does not come off easily, she is to compress over it.

In therapy-resistant individuals, .025 cubic centimeters of Squibb's staphylococcus ambotoxoid is injected intradermally and the patient requested to read the test dose twenty four hours later. Reaction larger than the size of a silver dollar indicates possible bacterial sensitization; the size of the reaction serves as a rough guide to the degree of sensitization present and helps determine the dosage dilution to be employed if desensitization is considered necessary. A severe reaction may aggravate the hand dermatitis, but such aggravation persists only a day or two.

Compresses, hand isolation, and soothing pastes usually suffice to bring the eruption under control after the first office visit. These measures are maintained so long as improvement continues. Should there be no improvement after the first visit, the patient is asked to confess how much "cheating" she has done. This is important, for even one exposure to tomato in the preparation of a salad may vitiate the benefits derived from two days of therapy. The patient is urged to adhere conscientiously to the outlined therapeutic regime.

When the skin is clear, protective creams containing silicones may be employed to prevent recurrence. These must be used with great caution, for they will aggravate almost any inflamed skin, and many normal skins will not tolerate them.

Cortisone and ACTH have value in getting the patient "over the hump," but the use of these potent steroids is fraught with danger. In addition to the usual contraindications, the patient may develop a dependency to these drugs which amounts almost to addiction. Moveover, cortisone and ACTH may interfere with normal antibody formation and the patient suffer a disappointing relapse when their use is discontinued. For severe, intractable cases, the employment of these drugs may be warranted for a short time, but for routine use they are mentioned only to be condemned.

If the hand dermatitis persists or is aggravated despite the measures outlined, referral of the patient to a competent dermatologist will often save the patient time and money, for the dermatologist has devoted a great deal of time to the study of this problem, and has many additional therapeutic and investigative tools available.

BIBLIOGRAPHY

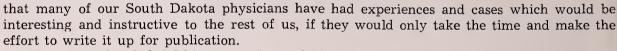
- Lane, C. G.; Rockwood, E. M.; Sawyer, C. S.; and Blank, I. H.: Dermatoses of the Hands, J.A.M.A. 128:987 (Aug. 4) 1945.
- MacKenna, R. M. B.: Psychosomatic Factors in Cutaneous Disease, Lancet 2:679 (November 25) 1944.
- Guy, W. B.: Neurogenic Factors in Contact Dermatitis, A.M.A. Arch. Dermat. & Syph. 66:1 (July) 1952.
- Sharlit, H.: Soap, and Soap as a Vehicle for Medicaments, Arch. Dermat. & Syph. 59:560 (May) 1949.
- 5. Waldbott, G. L.: Contact Dermatitis of the Hands, G. P. 6:32 (August) 1952.
- Rowe, A. H.: Atopic Dermatitis of the Hands Due to Food Allergy, Arch. Dermat. & Syph. 54:683 (December) 1946.
- Sulzberger, M. B.: In Discussion of Hermann, F., and Sulzberger, M. B.: Some Aspects of Sweat Disturbances, A.M.A. Arch. Dermat. & Syph. 66:162 (August) 1952.

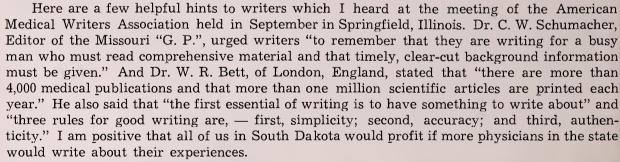


This is the first issue of Volume VII of our South Dakota Journal of Medicine and Pharmacy. When we started this publication seven years ago it was with high hopes but considerable misgivings regarding our success. Many good men with excellent experience in the medical publishing field predicted our failure.

Our financial success has been gratifying but we have been disappointed in that so few South Dakota physicians have taken advantage of their opportunity to get medical articles and case reports published. It is generally acknowledged that the writer of a scientific article benefits more substantially in an educational way than the reader, and I wish that I could emphasize that fact enough to get more of you to send in some papers or case reports.

Sir William Osler once said "an experience or study is not complete until it is written up and published." I know





At the Conference of Editors and Business Managers of State Medical Journals held in Chicago in November, the members of the staff of our Journal in attendance were elated when several specific compliments were bestowed upon the South Dakota Journal of Medicine and Pharmacy. And we were properly humble and contrite when some well-deserved criticisms were voiced by the speakers who were experts in their respective fields. We realize that we have some definite shortcomings. However, if each and every member of the South Dakota State Medical Association would assume that it is his personal responsibility to send in scientific articles, case reports, editorials and news items, we would soon have a much finer publication. Will you please include such a commendable determination as one of your irrevocable resolutions for 1954.

R. G. Mayer, M.D.



RURAL HOSPITAL MEDICAL RECORDS

All of us physicians, I am sure, realize the importance of an accurate, lengthy, authoritative hospital record; one which will yield adequate information to the physician who is making a study of some specific medical problem, to the interested and curious insurance company, to the probing court room inquiry, and to the hospital administrator who is trying to foresee the future hospital needs. It is for this reason that the various and many regulations have been established, compelling the hospital and the physicians on its staff to set up a program of record making which in many cases is not only expensive but also a great burden to all concerned. A record librarian, thoroughly trained in what is acceptable, is employed at a large salary to protect and safeguard the hospital's accreditation, to lift the worry of improper records from the heavily burdened administrator, and to inspire the staff physicians to work with childish enthusiasm at this task. Then, too, there is the question of the visiting pathologist, the visiting radiologist, and the properly trained laboratory technicians - necessary to support this program. All surgical specimens, whether important or not, are subjected to both gross and microscopic examination. This includes such tissues as normal skin, hemorrhoids, tonsils, hernial sacs etc.

It seems that the same regulations apply to the small town hospital which is operated on a limited budget and the city hospital with its large budget, endowment, large clerical staff, and house physicians who are present twenty-four hours each day to record the salient facts into the record. For the financially fortunate city hospitals to keep records which are beyond repute is no more than right. But, for its small town brother to do the same is well nigh impossible. Without house physicians, without money, and with general practitioners, who are all ready overburdened with paper work, the job won't be completed satisfactorily.

Arm chair physicians, who have never experienced the thrill of rural practice, should not sit in the urban areas and originate the rules for their rural colleagues. They, practicing in a fully-staffed teaching hospital, are technically capable of wise discussions on medical practice and policies; but, have much to learn of the rural hospital, the rural physician, his practice, his problems, and the ways in which his time might best be spent. Is it better that he neglect the sick to compile a record for the archives, or is it better that he attend the sick? The answer is obvious to all who view the problem with realistic thinking.

A simplified record on which the diagnosis is recorded, the treatment justified, and the result appraised should be adequate. The physician can do this in the great majority of cases with a few well chosen sentences. We all realize the need for complete histories, physical examinations, scientific probings, and daily progress notes. The physician should conscientiously pursue all of these essential elements; but, when not pertinent, why record it?

T. W. R.

SEROLOGY CONTROLS

The Director of the Division of Laboratories of the State Department of Health has announced a plan to send out specimens each month for use as controls for Syphilis Serology in those laboratories where pathologists are available. These specimens will be serum, seitz filtered, and containing a proper concentration of "merthiolate" to insure sterility. The sera will have to be inactivated before testing. In a sealed envelope accompanying the specimens will be a report of the results which should be obtained. Where a pathologist or other qualified individual is in charge of the laboratory, it is suggested that these reports be retained and used to check the results in the laboratory.

This is a commendable procedure and should be helpful in checking the results of the Kahn reactions of the various laboratories in the state. The medical profession in general and the pathologists in particular are deeply appreciative of this constructive step. Regardless of the ability of the personnel in the laboratory's conduct of these tests, technical errors occasionally creep in, and at times, even a false positive or a false negative may be obtained. Naturally, we must rely upon the accuracy of the result obtained at the State Board of Health Laboratory. We would feel more secure if we knew that these seras had also been checked in some other laboratories, - for instance, the Kahn Laboratory, because we are all aware that occasional mistakes, technical or otherwise, are made in all laboratories.

MEDICAL JOURNALISM COURSE

At the September meeting of the American Medical Writers' Association in Springfield, Illinois, a proposed course in medical editing and writing was worked out with both the University of Missouri and the University of Illinois. These two schools have devised a program of study which is in keeping with the basic philosophy and approximately one-fourth of a journalism student's four-year program should be devoted to professional journalism courses and three-fourths to academic courses. This curriculum includes courses in chemistry, biological science, bacteriology and preventive medicine, and other scientific courses relating to medicine.

The School of Journalism of the University of Missouri is preparing to introduce the program in 1954. The course of study is rigorous, but a graduate who has completed this program will easily find unusually interesting and profitable work with medical journals, large clinics, pharmaceutical publications and various other magazines.

The problem is how to inform young people with an interest in both science and writing of this training program. Perhaps the members of the medical profession may be in the best position to bring this matter to the attention of young people, particularly high school seniors or recent graduates. Keep it in mind when talking with young people who have a general interest in science, medicine and writing. Satisfying opportunities await qualified young men and women who pursue this important new field of professional training.

U.S.D. TEACHER SPEAKS AT A.A.A.S.

Dr. Harry J. Clausen, associate professor of anatomy at the University of South Dakota School of Medicine was one of the featured speakers at the American Association for the Advancement of Science meeting in Boston, December 16-19.

Professor Clausen's paper was titled "Studies of the Effect of Certain Drugs on the Thyroid Gland with Reference to Tumor Formation." He has been carrying on his research on this subject with grants from the South Dakota Division of the American Cancer Society for the past four years. In the course of his research, he has discovered that two tumorous diseases of the human thyroid, not necessarily cancerous, can be reproduced experimentally on animals by the use of an antithyroid drug.

THE MONTH IN WASHINGTON

The second session of the 83rd Congress is getting down to its task under conditions that could mean passage of considerable legislation of importance to medicine. Holding over from last session, or certain to be introduced this year, are bills touching on virtually every phase of medicine where the federal government could become involved. New laws are being proposed on veterans' care, social security, national health plans, care of military dependents, medical scholarships for military personnel, and many other subjects.

What will be done with this mass of legislation depends on an administration whose control over Congress is tenuous and a Congress looking forward to the fall, when all members of the House and one third of the Senate must be elected or reelected. As is the case every two years, most lawmakers will be listening closely to what's being said back home.

Awaiting congressional action is the administration's plan for extending the social security system to bring more than 10,000,000 additional persons, including physicians, under Old Age and Survivors Insurance (OASI). This legislation is known to have less support in the House Ways and Means Committee, where it is being handled, than it has in the Executive Branch.

American Medical Association, supported by dentists, lawyers, farmers, and many other groups of self-employed, has consistently opposed inclusion under OASI. The question now is whether this opposition will be articulate enough to convince Congress.

In place of social security for physicians, the AMA for several years has actively promoted legislation identified first as Reed-Keogh, then as Jenkins-Keogh, named for the sponsoring congressmen. This would allow physicians and other self-employed to defer income tax payments on a portion of their income, placed in restricted pension funds, obtainable in the form of benefits only in case of disability or at the specified retirement age. In this effort the physicians again

are joined by a large group of associations representing the self-employed.

Other possible amendments to the social security law involve total and permanent disability payments and waiver of OASI premiums for the disabled, so their final pensions won't be reduced because of periods when they had little or no income. In each of these, medical determinations would be required. In the past, these bills have threatened an expansion of the federal medical program, have laid out an unreasonable role for the physician, or have called for compulsory rehabilitation. While not opposed to the objectives, AMA has urged that both the patient and the physician be protected. In place of waiver of premium, the AMA proposes that pension rates be based on the 10 best earning years, thus obviating the need for medical determinations.

As in other sessions, Congress this year probably will be asked to pass legislation providing free hospitalization under OASI for all persons past 65 covered by OASI, and for other beneficiaries of the program. In other years Congress has not taken this idea seriously.

The veterans program is certain to provoke action. Last November, Veterans Administration amended its forms to require more financial information from veterans applying for hospitalization of non-service connected disabilities, who must state that they cannot afford private care. Congress may want to further clarify the government's obligation to veterans. It is expected also that special effort will be made to expand medical benefits for veterans by such methods as increasing the periods in which certain diseases may be presumed to be of service origin.

AMA's position on the care of non-service connected cases is well known. It consists of three points. First, the best possible care by VA for actual service-connected cases. Second — until local and state facilities are adequate — VA care for long-term tuberculosis and neurological cases when the veteran himself can't pay. Third, all other non-service connected cases to be the responsibility of the

veteran himself, his family, or his community.

The Defense Department has served notice that this session it will press hard for implementation of the Moulton Commission's recommendations for broadening the medical care program for military dependents. The Commission favored caring for as many dependents as possible at military installations, with the others receiving private care and the federal government paying all but a token of the cost. As its December meeting, the AMA's House of Delegates proposed that in this country the military provide medical care for dependents only where private facilities are not adequate.

Also up for decision this year is a Defense Department's proposal that the federal government furnish medical, dental and nursing scholarships, with the recipients obligated for government service at the rate of one year for every year of the scholarship.

There is a strong possibility of pressure to enact a program under which the federal government would in one way or another subsidize private health insurance plans. The idea is known to interest Rep. Charles Wolverton (R., N. J.), chairman of the House Interstate and Foreign Commerce Committee,

which last fall conducted a series of hearings on health matters. Senators Ives (R., N. Y.) and Flanders (R., Vt.) are offering a bill along the same lines in the Senate.

The controversial Bricker resolution holds over from the last session, and many receive early consideration in the Senate. Senator Bricker believes that Congress should have some check on the President's treaty-making powers. The American Medical Association repeatedly has indorsed the Bricker resolution as a safeguard against the introduction into this country by treaty of government-controlled medical plans without Congress itself having a chance to pass on them.

Awaited with interest in Washington are the findings of two Commissions appointed last year to look into the relationships between the federal government on the one hand and state and local governments on the other, and to investigate operations of the executive branch. The former is headed by Clarence Manion and the latter by former President Hoover. The Hoover Commission has until next year to make its report. The Manion Commission was instructed to have a report ready by March, but it may ask for more time.

MEDICAL EDUCATION PROBLEMS TOPIC OF CONFERENCE

Postgraduate medical education needs, and how these best can be met by medical schools, will be considered at the 50th annual Congress on Medical Education and Licensure in the Palmer House, February 7-9.

The meeting will be sponsored by the American Medical Association's Council on Medical Education and Hospitals, with the cooperation of the Federation of State Medical Advisory Boards of the United States and the Advisory Board for Medical Specialties.

Three panel discussions will be built around a preliminary report of a survey on postgraduate medical education undertaken by the Council on Medical Education and Hospitals. These panels will consider the objectives of such education, how to achieve these objectives and the needs of such programs — faculty, facilities and finance.

"The survey has brought out the views of doctors on their postgraduate education needs," said Dr. Edward L. Turner, Chicago, secretary of the council. "It will be the aim to combine these with the opinions of medical school facilities so as to provide a comprehensive and correlated program."

Dr. Edward J. McCormick, Toledo, president of the American Medical Association, who will be one of the principal speakers, will stress the importance in undergraduate medical education of instruction in fundamental professional ethics, public relations and medical practice.

CLASSIFIED AD

Electrocardiographer, certified, desires to interpret electrocardiograms by mail. Replies by return mail day of receipt. \$1.25 per interpretation. Box 111 South Dakota Journal of Medicine and Pharmacy.

SIOUX VALLEY MEDICAL SOCIETY

SIOUX CITY, IOWA, FEB. 23-24-25

PROGRAM

TUESDAY, FEBRUARY 23, 1954

Evening Session

8:00—Amos C. Michael, M.D., Vermillion, S. D. Professor of Pathology, University of South Dakota.

"Dehydration, with emphasis on Possible Complications of Low Salt Diets."

Smoker and Dutch Lunch will follow the paper. The members of the Woodbury County Medical Society will be your hosts.

WEDNESDAY, FEBRUARY 24

Morning Session

8:30—Sound Movie: "Oxygen Dosage and Techniques."

9:00—Egbert H. Fell, M.D., Chicago, Illinois "Cardiac Arrest" — with striking color movies.

10:00-W. D. Paul, M.D., Iowa City, Iowa

Associate Professor of Medicine, University of Iowa.

"Antibiotic Therapy and its Complications."

11:00—Charles K. Kirby, M.D., Philadelphia, Pa., Associate Professor of Surgery, University of Pennsylvania. "Neoplasms of the Lower Esophagus and Stomach, with emphasis on management of

Gastric Ulcers."

12:00—Noon. Medical and Surgical Luncheons with Round Table Discussions.

Afternoon Session

1:30—John P. Wendland, M.D., Minneapolis, Minnesota.

"Diagnostic and Prognostic Significance of Retinal Findings in Hypertension."

2:30—Charles K. Kirby, M.D.

"Acute and Chronic Pancreatitis."

3:30—W. D. Paul, M.D.

"Arthritis."

5:30—Social Hour — Assembly Room.

Evening Session

7:00—Banquet:

President's Address by Anton Hyden, M.D., President of the Sioux Valley Medical Association, Sioux Falls, South Dakota.

European Travelogue (1953) with three dimensional colored pictures by Omar Stauch, M.D., Sioux City, Iowa.

Informal—Ladies expected.

THURSDAY, FEBRUARY 25

Morning Session

8:00—Sound Movie: "The Exfoliative Cytologic Method in the Diagnosis of Gastric Cancer."

9:00—Charles D. May, M.D., Iowa City, Iowa. Professor of Pediatrics, University of Iowa. Clinic — "Cystic Fibrosis of the Pancreas."

10:00—Louis Brunsting, M.D., Rochester, Minn., Professor of Dermatology and Syphilology, University of Minnesota Graduate School.

"Systemic Lupus Erythmotosis."

11:00—Leon S. McGoogan, M.D., Omaha, Nebr., Professor of Obstetrics and Gynecology, University of Nebraska. "Endometriosis."

12:00—Noon. Luncheons: (1) Obstetrics, and (2) Pediatrics — Dermatological, with round table discussions.

Afternoon Session

1:30—Louis Brunsting, M.D.

"The Cancerous Dermatosis."

2:30—Charles D. May, M.D.
"The Cause and Treatment of Obesity in Childhood."

3:30—Leon S. McGoogan, M.D. "Abortion."



This is your MEDICAL ASSOCIATION



Introducing Mrs. Esther Howard, A.M. in Library Science. Medical Librarian, University of South Dakota

THE MEDICAL LIBRARY OF THE UNIVERSITY OF SOUTH DAKOTA

The purpose of the medical library of the University of South Dakota is not only to provide service to the staff and students of the institution, but to make its facilities available to anyone in the medical profession or others interested in the field of medicine or its ancillary branches.

The library contains in its collection 300 journals including the most outstanding ones in the basic sciences as well as in clinical medicine. Many of these have been bound for past years, and there are complete runs of some of these from volume one to the present year.

The book collection of about 2500 volumes reflects the basic science and clinical program of the two year medical school. It is a small, up-to-date, workable collection which is gradually being built up, and will, eventually, include the outstanding books needed for the courses in medical school; for a research program, and for general information of interest to the layman.

A recent addition to the card catalog is a file of the cards issued by the Library of Congress of moving pictures and filmstrips in the field of medicine. These cards give information about running time, place from which film or filmstrip is available, a brief description, and, in some instances, reference to a journal where an evaluation can be found.

DR. WILLIAMS HEADS ABERDEEN DISTRICT

The Aberdeen District Medical Society held their regular monthly meeting at the Sherman Hotel Mexican Room on Wednesday evening, December 2. After a steak dinner various medical economic subjects were discussed, and the following officers were elected for 1954: President, Dr. M. F. Williams, Conde; Vice-President, Dr. J. C. Rodine, Aberdeen; Secretary-Treasurer, (re-elected) Dr. B. F. King, Aberdeen: Director for three years, Dr. C. L. Vogele, Aberdeen: (Dr. B. C. Murdy still has two years to serve as director and Dr. R. G. Mayer has one year remaining) Board of Censors, Dr. G. J. Bloemendaal, Ipswich, for three years; (Dr. J. A. Eckrich has two years still to serve on the Board of Censors and Dr. P. G. Bunker has one year). The delegates and alternate delegates were elected for two years. Drs. M. R. Gelber and F. H. Cooley, Aberdeen, were elected as delegates and Dr. B. F. King and C. L. Vogele were elected as alternate delegates. Amendments to the by-laws, raising the dues for the State Association and the Aberdeen District Medical Society were introduced and final action will be taken on these amendments at the January meeting.

YANKTON DISTRICT ELECTS LIVINGSTON

Dr. R. F. Livingston, Yankton, was elected president of the 8th District Medical Society for the year 1954 at the Sacred Heart Hospital. Other officers are: M. B. Lyso, M.D., vice-president; and Marian L. Auld, M.D., secretary-treasurer. Drs. Livingston and Lyso are delegates with alternates J. P. Steele, M.D. and T. H. Sattler, M.D.

The program for the meeting was a paper titled "Recent Trends in Treatment of Placenta Previa" read by **Dr. Fred S. Stahmann,** Sioux Falls.

AMA RULE EASES PAYMENT FOR DELINQUENTS

At the St. Louis session of the AMA's House of Delegates in December a resolution was passed which liberalized reinstatement of members dropped as delinquent in 1950. The selfexplanatory resolution follows:

"RESOLVED, that any active member of the American Medical Association who failed to pay dues for the year 1950 and who was suspended for such delinquency, may be reinstated during the first six months of 1954 by payment of 1954 dues only.

Should such an individual fail to pay his 1954 dues by July 1, 1954, he shall continue to be considered delinquent."

NEWS NOTE

Dr. Maxwell Day has joined the staff of the Rapid City Medical Center in the practice of Urology.



John C. Foster, S. D. executive-secretary, sits at right hand of Dr. Dean A. Clark as he is being introduced as speaker at annual meeting of Cooperative Health Federation of America in St. Louis.

U.S.D. STUDENT'S TOP NATION

Sophomore medical students at the University of South Dakota last spring outscored other second-year medical students in the United States taking an achievement test in the subject matter of cancer. Dean W. L. Hard of the School of medicine has just been notified by the testing agency of the results of the examination.

The average score of the University of South Dakota sophomore medical students was a full four points higher that that of the second place medical school, Dean Hard was informed. More than three-fourths of all the medical schools in the Nation took part in the test which was prepared and administered by the Cancer Research Institute of the University of California. The test is designed to find out the level of knowledge concerning cancer that medical students have at each year of their course of study.

Dean Hard is of the opinion that the University of South Dakota medical students did so well in the cancer test because of three circumstances. In the first place, Dean Hard says that because the University school of medicine is only a two-year school and the students have to transfer to some four-year school for their junior and senior years, pathology, or the study of disase processes, is emphasized more in the sophomore year here than at some of the four-year schools. Another reason for the South Dakota students "knowing their stuff" in the subject of cancer is because they attend the tumor clinic at Sacred Heart hospital in Yankton each week as part of their class work. There they are introduced to the real problems of cancer and cancer diagnosis. A third reason suggested by Dean Hard is that the National Cancer Institute has sponsored a teaching grant at the University of South Dakota school of medicine which has contributed materially to the success of the cancer teaching program for the sophomore medical students here.

The cancer teaching program which Dean Hard describes as "exceptionally good," is under the directtion of Dr. Amos C. Michael, professor of pathology and head of the pathology department.

Annual Clinical Conference CHICAGO MEDICAL SOCIETY March 2-3-4-5, 1954 . . . Palmer House, Chicago

DAILY HALF-HOUR LECTURES BY OUTSTANDING TEACHERS AND SPEAKERS on subjects of interest to both general practitioner and specialist.

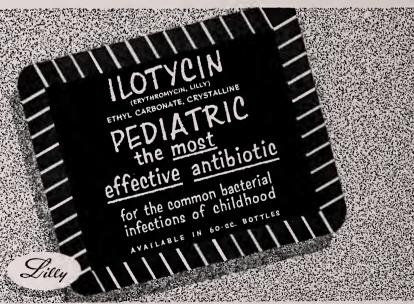
PANELS ON TIMELY TOPICS.

MEDICAL COLOR TELECASTS.

TEACHING DEMONSTRATIONS.

SCIENTIFIC EXHIBITS worthy of real study and helpful and time-saving TECHNICAL EXHIBITS.

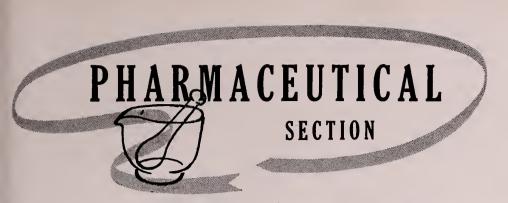
The CHICAGO MEDICAL SOCIETY ANNUAL CLINICAL CONFERENCE should be a MUST on the calendar of every physician. Plan now to attend and make your reservation at the Palmer House.



We are a distributor for Eli Lilly and Company. For quick, competent service, send your orders to us.

BROWN DRUG COMPANY

SIOUX FALLS, SOUTH DAKOTA



STATEWIDE NEWS ITEMS

Neal and Hazel Chancellor. Huron, took over the ownership of the Madison Drug and Jewelry Company from O. J. Tommeraason. November 26.

Chancellor, a graduate of State College, has been a pharmacist in South Dakota for many years and formerly owned a drug store in Huron.

Tommeraason, who has been a pharmacist for 32 years, bought a partnership in the Madison Drug and Jewelry Company in 1929. He has been sole owner since 1941. He has been active in civic affairs and the South Dakota Pharmaceutical Association. He plans to continue to make his home in Madison.

Lt. Eugene Palmer of the 34th Medical Battalion, Korea, will return to this country on February 1 and will be separated from the service on March 1. He will be available for a position sometime after that date.

Joseph Ahearne recently of Canby, Minnesota, was a visitor at the Division of Pharmacy, South Dakota State College.

DIVISION OF PHARMACY NEWS

Gerald R. Zins, senior pharmacy student from Nicollet, Minnesota, was one of six senior students recently elected to membership in Phi Kappa Phi National Honor Society. Membership in the Society is based on high scholarship and good character. Undergraduate membership at State College is further limited to the top six percent of the senior class.

Word has been received in Brookings of the death on Oct. 15 in Cincinnati, Ohio, of Mrs. Bower T. Whitehead. 90, widow of a former head of the pharmacy division at South Dakota State College. Prof. Whitehead was the first Professor of Pharmacy, 1895-1917, at State College.

A combined meeting of the Student Phar-

maceutical Association and Rho Chi Honorary Pharmaceutical Society was held in the Ballroom of the Union Building, November 18. The student body viewed two motion pictures, contributed by E. R. Squibb and Sons, Inc., entitled "Rx" and "Behind the Window."

The annual Christmas meeting of the **Student Pharmaceutical Association** was held in the Union Building Ballroom, December 9. The members were entertained by two short films and gifts were exchanged.

During the business meeting, the members unanimously voted to dissolve the Student Pharmaceutical Association. After approval of the constitution and by-laws, a petition was submitted to the American Pharmaceutical Association for the establishment of a South Dakota State College Chapter of the American Pharmaceutical Association, Student Branch.

THE ARMOUR PHARMACEUTICAL CENTER

A new manufacturing laboratory for producing ACTH, trypsin, insulin and other pharmaceuticals was opened formally (November 19, 1953) by the Armour Laboratories.

The plant, known as the Armour Pharmaceutical Center, stands on a 175-acre tract lying between U. S. Highway 54 and the Illinois Central Railroad two miles north of Kankakee, Illinois. Ground was broken by F. W. Specht, president of Armour and Company, June 21, 1951. Cost of the plant has been placed at \$12,000,000.

The center will produce Armour's line of special biological drugs, including ACTH, and other pituitary hormones, trypsin and other enzymes, insulin, thyroid extracts, various liver extracts and bovine albumin. Currently,

part of its facilities is devoted also to the production of blood fractions, gamma globulin for immunity against poliomyelitis and other infections, and human serum albumin, used by the armed forces to control shock.

The new Armour Pharmaceutical Center is designed so that all departments, from receiving through processing and packaging to shipping, are attached to a "spinal cord" corridor a quarter mile long. All processing rooms and laboratories open onto the corridor from the first floor as well as reception rooms, a coffee shop, and conference rooms. Its second floor level carries all the piping and conduits for the steam, water, gas, air, vacuum and refrigeration facilities necessary to the manifold operations.

Raw material for the plant comes in at the receiving dock which is located on the south side at right angles to the main corridor about midway between front and back. Boxes of various glands and other animal tissues move first to the glandular extraction section.

This section is the heart of the processing work of the plant. To its refrigerated storerooms and elaborate equipment come the frozen pancreas, liver, thyroid, pituitary, duodenum and other organs by the ton, to yield their minute amounts of powerful drugs. Initial processing is done in more than 70 tanks, of capacities up to 1,000 gallons. They are set half way between the floors, to be filled from the second floor and emptied from the first.

The tanks are all glass-lined and so connected that they can be combined or separated in any of a score of manufacturing processes. Thus they can be switched from one product to another with a minimum of delay. This flexibility is one of the emphasized features of the new plant.

Along with the tanks in the extraction section are banks of filter presses, the centrifuges, the desiccating ovens, condensers, vacuum extraction, distillation facilities, and over it all, miles of complicated piping.

The crude drugs from the glandular extraction area move next to the refining area, where smaller equipment of similar design removes impurities to make highly concentrated pharmaceuticals. Vacuum pipes are used extensively on the tanks so the solutions can be "boiled" at low temperatures and reduced in volume.

Next comes the sterile filling area, where vials are filled with the various parenteral products, under the cleanest conditions possible. Employees wear special dust-free uniforms, caps which cover the whole head, and masks. Only their hands extend under glass hoods which are further protected with ultraviolet radiation. The rooms are kept further germ- and dust-free by special air-conditioning units, located on the floor above and fitted with micronite filters.

Packaging of vials is done by an ingenious machine which folds a carton and a printed instruction sheet and inserts the vial and the instruction sheet in the carton. The same machine closes the single vial cartons and packs them in shipping cartons.

This equipment, together with other packaging facilities, is located on the south side of the corridor.

The packaging room connects with the big warehouse and shipping rooms, divided into domestic and foreign areas. These open directly on to the receiving and loading platform, capable of handling forty trucks at a time.

One of the principal accessory services is the big control laboratory, where every raw material, all material in process and all finished material are checked and checked again for purity, safety, standards and accuracy. All chemicals used in the various extraction processes are tested for purity, even to the character of their glass-lined containers. The functions of this department extend down to the wording of labels on different products.

The south side of the corridor, in addition to the control laboratory, pens into a series of offices, personnel, timekeeping, engineering and administrative. Likewise outside the production circuit are men's and women's locker and lounge rooms.

Currently a central section of the plant is completely walled off from other operations for processing human blood. Gamma globulin and serum albumin are produced here. This section contains the series of centrifuges, 1000-gallon tanks and other equipment necessary to this process. Two cold rooms, one at 45°, the other at 23°F., and a freeze drying room at 80° are part of this section.

The building along the rest of the corridor to the west of the production area contain important accessory plants. First comes an area devoted to ammonia compressors, water stills, de-ionizers, drying systems and similar equipment. Then there is the powerhouse, where three boilers generate 4000 horse-power, using gas in summer and coal in winter. Its stack, 275 feet high, flood lighted all night, can be seen for miles over the level farmland of the area. The refrigeration equipment is also in this section.

Off to the north is the tank farm, where 14 stainless steel tanks, nine of them holding 10,000 gallons each, store the solvents and other chemicals used in various processes. Nearby, too, are the high fractionating towers used in the recovery of solvents from waste material and two 150,000 gallon water tanks,

in reserve in case of failure of the municipal water supply, and cooling towers to bring down the temperature of used water.

The big plant, when in full operation, will employ some 550 persons, including a high percentage of scientists, principally chemists and biochemists.

Over the last few months one operation after another has been moved from previous locations in Chicago to the new plant, until now most of the Armour biological drugs are being produced there. The total includes such important drugs as insulin, thyroid, ACTH, and other pituitary hormones, trypsin, intrinsic factor, various liver fractions and numerous rare drugs.

RECENT PHARMACEUTICAL SPECIALTIES

Trinsicon (Hematinic Concentrate with Intrinsic Factor, Lilly)

A new antianemia preparation containing a liver-stomach concentrate of high hematologic potency combined with hematopoietic substances proved to be of value in the treatment of anemias.

Composition:

Liver-Stomach Concentrate, Lilly

(Containing Intrinsic Factor) 300 mg. Vitamin B₁₂ (Activity Equivalent) 15 mcg. Ferrous Sulfate, Anhydrous 300 mg. Ascorbic Acid (Vitamin C) 75 mg. Folic Acid 1 mg.

Dosage:

Two Pulvules daily produce a standard response in the average uncomplicated case of pernicious anemia (megaloblastic types) and provide at least the average dose for nutritional deficiency anemias (hypochromic types).

How supplied:

Bottles of 60 Pulvules.

Century-Pak

A new method of packaging capsules and tablets for bulk-shipment and storage has been instituted by Lederle Laboratories.

The new packaging form, Century-Pak, protects against moisture, reduces chipping and breaking, and will help prevent malformation and sticking of capsules at the

bottom of the drum even after long periods of time, according to Henry Wendt, Jr., Director of Sales.

Century-Pak consists of placing 100 capsules or tablets in a strong, moisture proof plastic bag and heat-sealing the opening. A number of these bags are then placed in drums for bulk shipment.

Another major advantage of the new packaging, according to Mr. Wendt, is the time the pharmacist saves in counting and bottling the capsules.

At present, nine Lederle products are being packed in the Century-Pak.

Furadantin Diagnostic Tablets

Description:

Each tablet contains 10 mg. of Furadantin, the new chemotherapeutic agent used in treatment of bacterial infections of the urinary tract. A yellow crystalline compound, Furadantin is the Eaton brand of nitrofurantoin, NNR. Chemically it is N-(5-nitro-2-furfurylidene) 1-amino-hydantoin. Use:

For laboratory determination of bacterial sensitivity of Furadantin, the antibacterial spectrum of which includes many strains of gram-negative and gram-positive organisms. Used in the same way as are other such test tablets or discs on agar plates. Tablets are stable in storage, to physiologic physiologic

to incubator and autoclave temperatures. Need not be refrigerated.

Technic:

Using flamed forceps, place tablets on freshly seeded agar plates, 3 or 4 cm. from other discs. Plates are incubated for 5 to 24 hours. Any type of nutrient agar may be employed; the antibacterial action of Furadantin, is not appreciably decreased by such organic materials as blood or serum. Available:

Vials of 25 ten mg. tablets, 3 vials per box. Eaton Laboratories.

Furoxone, a New Nitrofuran Drug

Furoxone, brand of furazolidone, developed by Eaton Laboratories, Inc., Norwich, N. Y., is the fourth and latest member of the nitrofuran family to find a medicinal application. It is used for the treatment of Salmonella infections in chickens and turkeys in "NF-180," the brand of furazolidone mixture recently placed on the market by Dr. Hess & Clark, Inc., Ashland, O.

Furoxone "is particularly effective both in vitro and in vivo against gram-negative bacilli, but certain gram-positive organisms, such as species of Clostridium and Bacillus anthracis, are also sensitive," reports John A. Yurchenco, Mary C. Yurchenco and Carl R. Piepoli of Eaton Laboratories in Antibiotics & Chemotherapy (3:1035 (Oct.) 1953).

The other nitrofurans are Furacin, an antibacterial agent for topical infections; Furaspor, an antifungal agent; and Furadantin, an antibacterial agent used systemically in bacterial urinary tract infections. Besides its uses in human medicine, Furacin is employed in bovine mastitis and porcine necrotic enteritis as NFZ, a poultry feed mix, for coccidiosis control.

The nitrofurans have been the subject of a \$3,000,000 research and developmental program at Eaton Laboratories since 1939. More than 500 furan, nitrofuran and hydrazine derivatives have been synthesized, a number of which were recently made available for experimental and technical use.

Caligesic Ointment

A greaseless analgesic calamine ointment supplied by Sharp and Dohme Division of Merck and Co.

Composition:

Each 100 gm. contains:

Calamine8 gm.

Benzocaine3	gn	n.
Hexylated Metacresol0	.05	gm.
Clinical Indications:		

'Caligesic' Ointment is a greaseless, bland ointment — an antipruritic preparation that brings prompt, welcome relief from irritative skin conditions. Its protective, astringent, analgesic properties allay the characteristic symptoms in contact dermatitis (dermatitis venenata, notably poison ivy and poison oak), summer prurigo, sunburn, and insect bites.

'Caligesic' Ointment also affords symptomatic relief in pruritic conditions such as cutaneous allergic manifestations arising from sensitivity to food and various medications.

For symptomatic relief of such skin conditions as infantile eczema, diaper rash, poison ivy, and insect bites, 'Caligesic' Ointment may be used to advantage for short periods in pediatric practice. Attention should be directed toward removal of the causative factors in the case of diaper rash and eczema.

In irritative skin conditions and inflammations such as pruritus ani, pruritus vulvae, and pruritus scroti, 'Caligesic' Ointment is of particular benfit in relieving the distressing discomfort until the possible cause can be determined and definitive treatment becomes effective.

How supplied:

'Caligesic' Analgesic Calamine Ointment is supplied in 1½ ounce and 4 ounce tubes.

Topical Ointment of Hydrocortone Acetate

Hydrocortone (Hydrocortisone, Merck) is one of the series of crystalline hormonal substances isolated from extracts of the adrenal cortex. To facilitate its use, the hormone is prepared as an ointment containing the following ingredients: hydrocortisone acetate, zinc stearate, polyethylene glycols, propylene glycol, and distilled water.

Action and Uses:

The Topical Ointment of Hydrocortone Acetate is recommended for use in the treatment of non-specific anogenital pruritus; allergic dermatoses such as contact dermatitis (e.g., poison ivy) and atopic dermatitis including allergic eczema, disseminted neurodermatitis, pruritus with lichenification, eczematoid dermatitis, food eczema, infantile eczema, as an aid to the conventional management of these allergic disorders.

The suppression of allergic dermatoses and allergic skin reactions by systemic hormonal therapy has been well established. The precise mechanism whereby these skin manifestations are suppressed is unknown. Immunologic phenomena have been variously implicated although it appears that the hormone prevents or counteracts the development of tissue reaction rather than inhibits antibody formation or the junction of antigen and antibody.

Following the use of Topical Ointment of Hydrocortone Acetate, the lesions become pale and flat and there is a subsidence of erythema, edema, and infiltration together with a decrease in pruritis. Furthermore, there are the advantages derived from such important factors as the prevention of scratching and consequent infection, loss of sleep, excessive motor activity, tension, and exhaustion. These are significant in all patients but especially so in the aged and in the young. The use of Topical Ointment of Hydrocortone Acetate produces improvement in a considerably shorter time than other forms of local treatment.

Hormonal side effects are not obtained by application of Topical Ointment of Hydrocortone Acetate.

How supplied:

Topical Ointment of Hydrocortone Acetate is supplied in two strengths, 1% and 2.5%, each in collapsible 5 Gm. tubes.

Ophthalmic Preparations of Hydrocortone Acetate

Hydrocortone (Hydrocortisone, Merck) is the most recent of the adrenal cortical steroids to be employed in the therapy of ocular disease.

Action and Uses:

Hydrocortone has proved to be effective in the treatment of certain eye disorders when administered systemically and/or topically, with the acute cases responding more favorably than the chronic.

It appears that Hydrocortone controls the inflammatory and exudative phases of ocular disease, but does not influence the basic cause of the inflammation. It, therefore, has its optimum effect in self-limited ocular lesions, in which it may suppress the destructive phases of the disease, or in chronic ocular disorders where the inflammatory and exudative phases threaten the functional integrity of

the eye. In this latter type, treatment with Hydrocortone may be combined with specific antibiotic therapy so as to preserve the functional integrity of the eye until specific therapy has eliminated the infection.

The systemic administration of Hydrocortone affects all the tissues of the eye, including the cornea and the anterior and posterior uvea.

Topical application of Hydrocortone appears to affect principally the anterior segment of the eye — the cornea and the anterior uvea — and to have less influence on disease of the deeper structures.

Hence, it is advisable to reserve systemic administration for diseases of the deeper structures and to use the topical mode of administration routinely for inflammatory lesions of the anterior segment.

Topically applied, ophthalmic preparations of Hydrocortone have proved effective in the following inflammatory lesions of the anterior segment of the eye:

Nonspecific superficial keratitis
Deep keratitis
Acne rosaea keratitis
Herpes zoster ophthalmicus
(not herpes simplex)
Phlyctenular keratoconjunctivitis
Allergic conjunctivitis
Mild acute iritis
Chronic iritis
Recurrent marginal ulceration

Secondary glaucoma from anterior uveal inflammation, also, can usually be controlled by topically administered Hydrocortone.

Hereditary and degenerative eye diseases in general do not show any response to treatment with Hydrocortone preparations. Dosage:

The recommended dosage of the ophthalmic suspensions of Hydrocortone is one or two drops instilled into the conjunctival sac every hour during the day and every two hours during the night for the first two days. If a favorable response has been observed, the dosage can then be reduced to one drop every four hours, and later to three or four times daily as a maintenance dose if this proves sufficient to control the symptoms.

In cases that require the use of an eye pad, the ophthalmic ointment of Hydrocortone may be preferred to the suspension. It should be applied three or four times a day. In cases being treated during the day with the suspension, the ointment may be applied at bed time in order to avoid the need for disturbing the patient's sleep with repeated instillations. Storage:

Ophthalmic preparations of Hydrocortone should be protected from freezing to avoid the possibility of the formation of aggregates or larger crystals which may render the product unsuitable for ophthalmic use.

The ophthalmic suspensions of Hydrocortone are supplied as sterile preparations. Care should be exercised to avoid contamination. How supplied:

Ophthalmic preparations of Hydrocortone are supplied in the following forms:

Ophthalmic suspension in two concentrations — a 2.5% suspension and an 0.5% suspension in a nonirritating phosphate buffer vehicle — 5 cc. vials in either concentration.

Ophthalmic ointment — a 1.5% ointment in a petrolatum base — 3.5 gram tube.

Serpasil (Reserpine-Ciba)

Description:

Serpasil is a pure crystalline alkaloid of Rauwolfia serpentina possessing the essential antihypertensive actions of the whole root. As a tranquilizer-antihypertensive, it provides sedation and slowing of the heart rate as well as antihypertensive action.

Action and Uses:

For mild, gradual, sustained lowering of blood pressure. No undesired effects from unknown alkaloids of the whole root. When the effect of Serpasil alone is inadequate, Serpasil may be used in combination with other antihypertensive agents. Fall of blood pressure and decrease in pulse rate gentle and gradual, with no rapid fluctuations or "spiking." Sustained effect may last for several weeks after drug is discontinued.

Potency of Serpasil is uniform and constant, thereby facilitating accuracy in dosage and predictable therapeutic effect. Mild sedative effect and tranquilizing action are

often therapeutically desirable. Dosage:

Usual initial dose one 0.25 mg. tablet 3 or 4 times daily for 2 to 3 weeks. May then be reduced to 0.5 mg. or less daily, provided satisfactory response has been obtained and can thus be maintained. As little as 0.1 mg. per day may be adequate. Blood pressure determinations should be made weekly under uniform conditions.

In more severe cases where the fall in blood pressure is not deemed adequate after course of Serpasil alone for 2 to 3 weeks, the daily dosage of Serpasil may be reduced to 0.25 mg. twice daily and Apresoline added to the regimen.

In such cases, the initial recommended dose of Apresoline is 25 mg. (1 blue tablet) 4 times daily. If, after a week or two on such a combination, the reduction in blood pressure is still not considered satisfactory, the daily dosage of Apresoline may be gradually increased over a period of 7 to 10 days to 50 mg. 4 times daily, while the Serpasil dosage is left unchanged. Later the dosage of Apresoline can frequently be reduced with no significant increase in blood pressure.

Side Effects:

With Serpasil alone, side effects are usually mild. No serious toxic reactions have been reported. Some patients may experience drowiness, lassitude, nasal stuffiness, looseness of stools, and, rarely, anorexia, headache, nausea and dizziness. Nasal stuffiness may be alleviated by use of a suitable topical vasoconstrictor. Side effects such as headache, palpitation and tachycardia, frequently associated with the use of Apresoline as the sole antihypertensive agent, are rarely encountered when the patient has been first "primed" with Serpasil.

How Supplied:

Serpasil Tablets, 0.25 mg. and 0.1 mg.; bottles of 100.

ABSTRACT OF A PRELIMINARY CLINICAL REPORT ON THE EFFECTIVE-NESS OF SODIUM N—LAUROYL SAR-COSINATE IN THE CONTROL OF DENTAL CARIES*

A one-year clinical test was made involving 2,265 persons, of whom 951 used a dentifrice containing 2% sodium N-lauroyl sarcosinate, 686 used a placebo dentifrice and 628 used dentifrices of their own choice. X-ray examinations showed conclusively that about 60% fewer new cavities developed during the year among those who used the particular dentifrice containing sodium N-lauroyl sarcosinate.

Experimental Procedure

The test subjects used were mostly university students with an average age close to 23 years. None of the subjects was over 35 years of age. They were selected from widely separated geographic areas.

At the beginning of the test and after one year, each subject was carefully examined for dental caries by means of mouth mirror, explorers, air syringe and light. A special radiographic technique was also used to obtain two crown view exposures of each of the posterior teeth and regular root view exposures of the anterior teeth were obtained. Ten films in all were made at each examination. The X-ray films were examined independently by at least two specially trained examiners. After these results were recorded, a third reading was made with both the previous independent records available. Any discrepancies in the two results were orientated and the results recorded as the number of new carious surfaces per person.

All the test subjects were placed in two basic groups — the control subjects who used dentifrices of their choice or a placebo product, and the test subjects who were given a special dentifrice like the placebo except that it contained sodium N-lauroyl sarcosinate. The placebo dentifrice used contained dicalcium phosphate, calcium carbonate, glycerol, gum, flavoring and 2% of a sulfated monoglyceride detergent. This detergent, while known to have enzyme inhibiting prop-

*Northwestern University Dental School Bulletin, Autumn 1953, based on work supported by grants from the Colgate-Palmolive Company. erties, was shown in laboratory tests to exhibit poor retention in the mouth or at the tooth surface. The test dentifrice was identical to the placebo except for the detergent which, in this case, was 2% sodium N-lauroyl sarcosinate. This substance had previously been shown in laboratory test to be an effective enzyme inhibitor that was retained at the tooth surface from twelve to twenty-four hours.

The details of this division of test subjects into groups follow:

Control Groups:

- I. (Random) These subjects continued their oral hygiene procedure according to their established habits, using any dentifrice of their choice.
- II. (Placebo) These subjects were instructed to brush their teeth on arising and retiring with the placebo dentifrice.

Test Groups:

- I. (Brushing twice daily) This group was instructed to use the test dentifrice containing sodium N-lauroyl sarcosinate on arising and retiring.
- II. (Brushing after meals) This group was asked to use the test dentifrice containing sodium N-lauroyl sarcosinate within ten minutes after meals or if this was impossible, to rinse their mouths with water while still at the table.

Experimental Results and Conclusions

The tables below show the results of the first year's radiographic records. These results are based upon examination of 2,265 subjects who completed the first year of the test.

Examination of the results shown in Table I, to determine their statistical significance, shows that the reduction in caries activity obtained with the test dentifrice is probably the same regardless of the pattern of usage.

In Table I, all differences between control group and test group figures are statistically significant to a 0.001 level.

On the basis of previous experience the second-year results should be similar unless

Table I First Year's Results

	Control Gro	up		Test Group	o
Type of	Number	Average Number	Type of	Number	Average Number
Control	of	Carious Surfaces	Test	of	Carious Surfaces
Group	Cases	Per Person	Group	Cases	Per Person
I. Random	628	0.63	I. Brushing		
II. Placebo	686	0.72	Twice Daily	700	0.27
Total Control	1314	0.67	II. Brushing		
			After Meals	251	0.35
			Total Test	951	0.29

Table II

Distribution of Individuals According to
Number of New Carious Surfaces Developed

Number of	Control Group	Test Group
New Caries	1314 Cases	951 Cases
0	55.17%*	78.55*
1	28.77	16.19
2	11.80	3.79
3	2.36	0.84
4	1.60	0.53
5	0.23	0.10
6	0.07	

^{*}Statistically significant to .001 level

a tolerance for the inhibitor develops.

From Table I, it can be seen that the overall reduction in the number of carious surfaces is the difference between 0.67 and 0.29 or 0.38. This reduction amounts to 57%. It should be noted that the incidence of new

cavities in the control group was higher in a previous clinical study where the observed incidence was 0.87 per person the first year. If these had been used as controls in this study, the overall reduction would calculate to 67%.



CARCINOMA OF THE GALLBLADDER CASE REPORTS John V. McGreevy, M.D., F.A.C.S. Edmond J. McGreevy, M.D., F.A.C.S., F.I.C.S. Sioux Falls, South Dakota

Despite the gloomy picture that Carcinoma of the gallbladder and biliary tract presents, it is necessary from time to time for clinicians to report their experiences with the disease. Only by the analysis of their past experience can planning for the future be accomplished.

Heretofore the importance of those tumors has been considered limited because of their rarity in comparison to those arising from other sites of the body, such as the stomach, uterus, or the breast. Yet data is accumulating to the effect that perhaps 6 per cent of all deaths in this country due to cancer are the results of malignant growths in the gall-bladder or extraphepatic ducts.

The vital statistics of the United States Public Health Service report 10,598 deaths in 1948 due to cancer of the gallbladder and bile ducts. No breakdown of the figures is available, but detailed reviews by various clinics show the usual ratio of Carcinoma of the gallbladder to Carcinoma of the bile ducts to be about 6 to 5. Therefore, it may be said that roughly 6,000 deaths each year in the United States are due to Carcinoma of the gallbladder.

The history of a patient with Carcinoma of the gallbladder is usually indistinguishable from that of a patient with Cholelithiasis. The high incidence of stones in the gallbladder, commonly reported at from 80 to 100 per cent, renders differential diagnosis even more difficult. There is often a long history of biliary tract disease, extending over 20 years or more. History suggestive of chronic gallbladder

disease is obtained in one-fifth to one-third of persons with cancer of the gallbladder according to Tragerman.² For one reason or another, the patient has learned to tolerate his or her symptoms until further ones appear, such as anorexia, jaundice or weight loss. At operation, a Carcinoma of the gallbladder with local extension and distant metastasis is found. It has been just as common in our experience to find gallbladder malignancy unexpectedly in patients whose symptoms have changed little in the recent past.

The most optimistic reports of survival following discovery of Carcinoma of the gall-bladder have been those of Warren and Balch,³ Sheinfeld,⁴ and Sainburg and Garlock.⁵ Warren and Balch³ collected a series of 35 patients who underwent operation. Four of these were considered as probably having

Table I The Incidence Of Calculosis In Cancerous Gallbladder 10

Author	Per Cent
Judd and Gray	64.6
Musser	
Fuetterer and Haberfield	
Shelley and Ross	73.7
Boyd	
Papin	
Frerich	
Dela Vale	82.0
Eurico Bastos	84.6
Teidemann	85.0
Courvoisier	88.0
Deaver	88.0

Zenker	90.0
Blumer	90.0
Fabrus	90.0
Savy	90.0
Fredimann	92.5
Ducueny	94.0
Judd and Baumgartner	94.0
Siegert	95.0
Moynihan	95.0
Keene	95.0
Riedel	_ 95.0
Janowski	100.0

Table II The Incidence Of Cancer In Cases Of Stones¹⁰

Author	Per Cent
Erdmann	1.14
Eurico Bastos	2.29
Kehr	3.00
Heller	3.34
Gessner	4.00
Lentze	4.3-5.1
Rolleston	
Graham	4.50
Moynihan	5.00
Mayo (1920)	5.70
Quirno	6.13
Riedel	7.80
Fawcett and Rippmann	8.10
Mayo-Robson	10.00
Giolja	12.50
Sherril	14.00
Schroeder	15.00

had all tumor removed. One of these was alive twelve years later, and one lived two years post-operatively. Sheinfeld⁴ reviewed 417 cases in the literature and listed 16 patients, 3.5 per cent, as living more than five years. Sainburg and Garlock⁵ found that in a group of 65 patients only 1 survived more than 35 months post-operatively. Yet Tragerman² states, "almost all patients, whether operated upon or not, are dead or have recurrences within two years."

Evarts Graham⁶ published an article in 1931 entitled "The Prevention of Carcinoma of the Gallbladder." He advocated Cholecystectomy for all patients with gallstones regardless of whether they had symptoms from them or not. He felt that this was the best way to decrease the incidence of gall-

bladder Carcinoma. He stressed that the disease is not rare and that statistical studies show that biliary calculi are associated with Carcinoma in from 69 to 100 per cent of the cases reported in series.

Of equal or even great concern has been the question of what is the incidence of Cancer of the gallbladder in patients with stones. In a series of 13,330 consecutive autopsies, Kirshbaum and Kozoll⁷ found that of 55 patients with Carcinoma of the gallbladder, 72.6 per cent had stones. He observed further that 3 per cent of the patients with gallstones in this same series had Carcinoma of the gallbladder as well. In view of this data and the fact that the highest incidence is found in the sixth and seventh decades of age, it seems reasonable to assume that up to 5 per cent of the patients with gallstones who reach the age of 69, our present day life expectancy, may develop Carcinoma of the gallbladder. If this is true anticipation, then it follows that one valid reason for removing a gallbladder containing stones is to prevent the development of Cancer.

Although stones are not found to be associated with Carcinoma of the bile ducts as frequently as with Carcinoma of the gallbladder, Marshall,⁸ Kirshbaum,⁷ and Stewart,⁹ have reported their presence in from 21 to 55 per cent of their cases. This is a higher frequency than is found in non-malignant disease. The role of stones and their association with Carcinoma of the bile ducts is without adequate explanation thus far, but a derivative of cholic acid in the bile, methylcholanthrene, is known to be a Carcinogen and may play a part.

Case No. I Mrs. W. S.

> McKennan Hospital 80019

This 68 year old white female presented herself for care in June 1947 because of soreness in abdominal scar resulting from a cholecystostomy in 1910. This discomfort does not interfer with sleep but is increased by lifting or reaching and has been present for six months. Greasy foods are avoided because they produce belching. The patient believes she has lost some weight estimated to be 30 pounds in the past six months. Examination reveals a short, stock, obese woman weighing 190 pounds. A hard, non-tender,

calcified mass presented itself to inspection and palpation in the upper angle of the old surgical scar. Surgery revealed a very thickened gallbladder which was tightly packed with stones and covered with adhesions to the omentum, and right colon. There was a mass in the abdominal wall about the size of a man's fist which communicated directly with the fundus of the gallbladder. The patient was subjected to cholecystectomy with excision of abdominal wall mass, which she stood very well. The pathologic report was adenocarinoma of the gallbladder with metastasis to the abdominal wall. Seven months later the patient weighing 187 pounds returned for check up and was found to have a small firm nodule to the right of the surgical scar. She postponed removal for a month, by which time her weight had slipped to 182 pounds. In February 1948 she submitted to removal of this nodule which proved to be Metastatic adenocarcinoma of the fascia of the external oblique muscle. When last seen, one year after cholecystectomy, she weighed 155 pounds and was presenting obstructive symptoms. A gastroenterostomy was contemplated for relief only to have her fail to return.

> Case No. II Mrs. P. U.

> > Sioux Valley Hospital 116905

This 73 year old white female presented herself for care in August 1951 beause of constant pain in the gallbladder region for two weeks. Forty years ago she was told she had gall stones but refused surgery. She has been unable to eat fatty or fried foods since because such food precipated pain, nausea and vomiting. Prior to this attack relief was always obtained by vomiting. Examination was essentially negative except for a large palpable, painful mass in the right upper quadrant of the abdomen and a mild diabetes. Four days after being hospitalized she was submitted to surgery which revealed a very large gallbladder packed with stones and studded with small, white, hard implants. There were a few implants upon the liver as well as several hard glands surrounding the common duct. Surgery consisted of a cholecystectomy and the pathological report was papillary adenocarcinoma of gallbladder and choleystolethiasis (massive). The patient had a rather normal post operative course even

though hospitalized a week longer than is our custom. She remained free of her original complaint for four month — death occuring 5½ months later. The patient developed a progressive jaundice about six weeks prior to her demise.

Case No. III Mrs. L. M.

> McKennan Hospital 10379

This 58 year old white female presented herself for care in October 1951 because of painless jaundice of ten days duration. At the time she noticed her icterus she was aware of dark urine, light colored stools and itching. She stated that about a month ago she began to loose her appetite and was occasionally nauseated - has lost 10 pounds this past month. No history of fever, chills, etc. obtained. She experienced her first gallbladder trouble thirteen years ago and has had only two attacks since but was never jaundiced. Positive findings on examination was jaundice grade III, icterus index 52 units, and urine positive for bile. At surgery the gallbladder was found to be very tight, hard, and contain stones; the common duct was opened and no bile was obtained. A biopsy of the common duct was taken and frozen section report was carcinoma. The lesion extended up into the right and left hepatic duct into the hilus of the liver. The left hepatic duct was opened at the hilus of the liver and a small amount of bile obtained, however, it was impossible to pass a probe. A modified Roux anostomosis was accomplished suturing a long loop of jejunum, anti colic to the liver hilus. The pathologic report was chronic cholecystitis, marked cholecysolithiasis, secondary adenocarcinoma of wall of gallbladder and hepatic duct; gross and microscopic examination fails to reveal original source of carcinoma but it most likely is arising from ductle system of biliary tract. The patient was discharged from the hospital two weeks after surgery having a icterus index of 26, and near normal stool. She resumed her household activities and completely lost her jaundice. Weight loss continued to be gradual, death occuring two years after surgery.

SUMMARY

1. Cancer of the gallbladder and extraphepatic bile ducts constitute about 6 per cent of all malignant tumors resulting in death.

(Continued on Page 36)



SOME PROBLEMS ASSOCIATED WITH SURGERY OF THE BILIARY TRACT* Howard K. Gray, M.D., Division of Surgery, Mayo Clinic, Rochester, Minnesota

Chronic Cholecystitis Associated With Cholelithiasis

In considerably more than 90 per cent of all cases of disease of the biliary tract in which surgical intervention has been required, it has been found that the gallbladder was involved by a pathologic process or was utilized in the operative procedure.

In general, there are only 2 legitimate reasons for surgical intervention for any lesion. The first of these is to relieve the patient of distressing or annoying symptoms, and the second is to afford as much protection as possible against potential complicating features in the future. The presence of stones in the gallbladder, as evidenced by clinical history, roentgenologic examination, or both, usually is sufficient to warrant exploration of the affected viscus, provided the general condition of the patient has been carefully assessed and it has been determined that he or she will tolerate the stress imposed by operation. It is to be assumed that this precaution is applicable throughout this presentation whenever surgical intervention is advocated, for in violating this fundamental surgical principle a grave injustice may be done or the results may be tragic.

In cases in which gallstones do not cause any symptoms directly referable to the gallbladder but are found incidentally in the course of roentgenographic examination, they

are erroneously designated as "silent stones." In such cases, the surgeon is justified in advising operation at as early a date as can be arranged with the minimum of inconvenience. Experienced surgeons and clinicians have insisted that there are no "silent" gallstones, in spite of the absence of symptoms directly referable to the gallbladder. That gallstones may be quiescent for varying periods is granted, but the term "silent" fails to indicate the potential significance of these malefactors. Follow-up studies have shown that in a very high percentage of cases the stones do not remain "silent" for long and that surgical intervention has been urgent in an appreciable number of such cases owing to the development of complicating features such as obstructive jaundice. As is true of any statistical study, figures mean little when an individual patient is being considered. In the absence of any method by which it may be determined accurately that a particular patient in whom "silent" stones have been demonstrated is more or less likely to experience difficulty in the future, all patients who have gallstones of this type must be treated as though a potentially dangerous condition was present.

Positive evidence of the presence of calculi obtained from a qualified roentgenologist is of extreme value, but in many instances information regarding the ability of the gall-bladder to concentrate the opaque dye and to empty under varying conditions should be utilized only as an adjunct to a clinical diag-

^{*} Read at the meeting of the South Dakota State Medical Association, Rapid City, South Dakota, June 16, 1953.

nosis. Cholecystography may be misleading in a variety of ways. Failure of the gallbladder to concentrate the dye may be due to the simple fact that the patient has been unable to retain the dye if it has been given orally or that an obstructing lesion at the pylorus has prevented passage of the dye into the intestine. Not infrequently, gas in the intestine will obscure the region of the gallbladder in spite of efforts to move it along in the interval between roentgenographic exposures. In some cases in which the results of cholecystography are reported as normal and the roentgenologist does not mention gallstones, the presence of cholelithiasis can be demonstrated by repeating the cholecystographic examination and using only half the quantity of dye used at the time of the previous examination. It also should be remembered that for reasons as yet unclear a gallbladder apparently may be unable to concentrate any appreciable amount of dye on one occasion but within a relatively short period of time will concentrate this substance and empty in a normal manner.

Acute Cholecystitis

The question as to proper time to operate in a case of acute cholecystitis has proved to be highly controversial. Much has been written in favor of early versus delayed surgical intervention, but in most instances confusion has arisen regarding what actually constitutes early and delayed operation in cases of acute cholecystitis. There is rather widespread agreement that operation should be undertaken before marked pericholecystic and pericholedochal inflammatory reactions have occurred, for at a later date one has to deal with structures that are markedly friable, edematous or indurated, and under such circumstances there is a much greater possibility of injuring the extrahepatic bile ducts or the hepatic blood vessels if the gallbladder is removed. The fear of injuring these structures may deter one from attempting to remove the gallbladder, and the patient may be deprived of the full benefit of the operative procedure, for an acutely inflamed gallbladder should be removed if unreasonable risk is not imposed. Within the first few hours, the patient may still be in good condition whereas an attempt to allow the acute inflammatory reaction to subside before one operates may permit dehydration to occur from prolonged vomiting or anorexia.

Under no other circumstance is it more important to consider individual factors than in attempting to decide when operation should be performd in a case of acute cholecvstitis. It is probably undesirable to establish a uniform method of treatment of acute cholecystitis, for no patients present similar problems. In general, however, exploration within the first few hours after the onset of symptoms seems to have more advocates than does the plan that entails delay. One must not lose sight of the fact, however, that in many instances there is no correlation between the clinical and the pathologic manifestations of acute cholecystitis. In cases in which the clinical findings suggest the presence of minimal inflamation of the gallbladder, operation not infrequently will disclose an acutely inflamed gallbladder. On the other hand, in cases in which the patients have many of the characteristic signs and symptoms of acute cholecystitis, operation not uncommonly will fail to disclose any evidence of acute inflammation of the gallbladder. It is obvious, therefore, that in evaluating the results of surgical treatment of acute cholecystitis one should know the evidence on which the diagnosis is based. In cases in which the diagnosis is based on microscopic evidence of acute inflammation, the results of operation may differ radically from the results in cases in which the diagnosis is based on the clinical signs and symptoms or on gross examination of the gallbladder.

Postcholecystectomy Stricture and Injury of the Hepatic Arteries

The significant increase in the incidence of traumatic stricture of the extrahepatic bile ducts has been emphasized by many observers. While prompt recognition and early repair will often prevent the potentially serious outcome of stricture of the common bile duct. many patients who have this type of stricture bcome chronic biliary cripples. Physicians are familiar with the successive plastic procedures that are performed on the ductal system, the unreliability of most prosthetic appliances, the recurrent episodes of jaundice, chills, fever and pruritis, and the economic hardships and psychic trauma which accompany the struggle against recurrent stricture and progressive biliary cirrhosis.

Operative injuries of the extrahepatic bile

ducts often are attributed to an anomalous arrangement of the ductal system. Actually, such injuries rarely are due to this cause. An anomalous arrangement of the hepatic arteries is observed much more frequently than an anomalous arrangement of the bile ducts. Postcholecystectomy stricture usually is due to one of the following causes. Owing to laxity of the peritoneal investment of the ductal system, traction on Hartmann's pouch may produce angulation of the common bile duct, and a portion of the duct may be included in the clamps on the cystic artery in cases in which the cholecystectomy is easy to perform and exposure can be obtained with facility. The common bile duct may be injured in cases in which exposure is poor or an inflammatory reaction has distorted the structures or obscured the anatomic landmarks. In cases in which sudden hemorrhage occurs from a normal or an anomalous cystic artery, blind clamping of the artery may cause injury of the duct.

The avoidance of injury of the hepatic arteries in the course of operations on the biliary tract has received inadequate attention. Although the hepatic arteries transport only approximately a fourth of the afferent flow of blood to the liver, the internal respiration of the hepatic parenchyma depends on this fraction. In view of the fact that in approximately 50 per cent of all persons the right branch of the hepatic artery crosses either in front or behind the common hepatic duct at or near the junction of the cystic and common bile ducts and curves upward in the angle of Chalot toward the porta hepatis (transverse fissure) after paralleling the course of the terminal part of cystic duct, the ease with which this vessel may be ligated inadvertently unless meticulous care is exercised in exposing the structures in the hepatic pedicle is apparent.

Jaundice

When a surgeon has to treat a patient with jaundice, he wishes to know whether the patient has a type of jaundice that can be relieved by surgical means. To make this decision, he must determine whether the jaundice is hemolytic, hepatocellular or obstructive in origin. In making this diagnosis, the value of physical examination and a complete and carefully taken history cannot be overemphasized. Laboratory tests of liver

function not only are of great value but they frequently are the only means of confirming the diagnosis of the type of jaundice.

There apparently is no laboratory procedure that will test all of the functions of the liver. It is easy to see why this is so when one realizes that the liver probably is the most important single organ in maintaining the various factors of homeostasis within the body. It accomplishes this not only by its influence on the metabolism of carbohydrates, lipids, proteins and vitamins but also by many other functions. Because of this great diversity in the activity of the liver, a test of liver function is designed to test only one specific function. The test however may be used to determine the relationship of this specific function to other functions of the liver.

Any pathologic condition of the liver which will produce changes in one function of the liver ultimately will cause enough injury of the hepatic parenchyma to produce changes in other functions. The average length of time for this secondary injury to become manifest is 2 to 4 weeks. Hence liver function tests are of greatest aid in the diagnosis of jaundice during the initial 2 weeks of the disease. After this time has elapsed, the results of all of the tests tend to be positive to a varying degree, and hence the specificity of the various tests is lost as is their diagnostic value. For this reason, liver function tests for the diagnosis of jaundice should be performed as early in the course of the disease as possible.

Tests which have proved most valuable in distinguishing the various types of jaundice are listed in the accompanying table.

Comment

As a surgeon reviews the problem of diagnosis of the different types of jaundice, he is struck by the great value of a complete physical examination and a carefully taken history. In many cases, the diagnosis can be made by these means alone. However, in spite of the certainty with which one can make the diagnosis in many cases, liver function tests should be performed to confirm the diagnosis even when the clinical picture seems to make the cause of the jaundice obvious. This may seem superfluous at times, but if the tests are done, they may result in a correct diagnosis in some cases in which the clinical picture is entirely misleading and they thus may save the patient an unneces-

Table

Clinical Signs and Results of Laboratory Tests in Cases of Different Types of Jaundice

		Type of Jaundice			
Clinical signs and	Normal	Hepatogenous	Obstr	uctive	Hemolytic
laboratory tests			Calculi	Carcinoma	Hemolytic
Jaundice	Not present	Variable	Variable	Deep and per- sistent	Variable
Clinical evidence of hepatic dysfunction		Early	Late and pro- gressive	Late and pro- gressive	None
Icterus index	4 to 6 units	Increased	Increased	Increased	Increased
Serum bilirubin*		Direct and indirect reacting increased		Direct reacting markedly in- creased	Indirect reacting increased
Urobilinogen*		Present in stools and urine	Present in normal or de- creased amounts in stools and urine	stools or urine	Markedly increased in stools; normal or slightly in- creased in urine
Duodenal contents*	Bile present		Bile present in normal or decreased amounts	Bile not present	Bile present
Prothrombin time (Quick's method)*		Prolonged; poor response to vitamin K	Prolonged; good response to vitamin K	Prolonged; good response to vitamin K	Normal
Cholesterol, total	150 to 250 mg. per 100 cc. of plasma	Normal or de- creased	Increased	Increased	Normal
Cholesterol esters*	110 to 175 mg. per 100 cc. of plasma	Decreased	Increased	Increased	Normal
Dye retention	None	Increased	Increased	Increased	None
Hippuric acid, uri- nary excretion in 4 hours after oral ad- ministration of 6 gm. of sodium benzoate		Decreased, 2 gm. or less	Normal (early)	Normal (early)	Normal
Serum alkaline phosphatase (Bodansky's method)		creased	Increased	Increased	Normal
Serum amylase (Somogyi's method)	Less than 320 units		Increased	Increased	Normal
Serum lipase (Comfort and Osterberg's method)	Less than 0.3 cc. of tenth-normal solu- tion of sodium hydroxide	Normal	Increased	Increased	Normal
Glucose tolerance	Normal curve for blood sugar	Tolerance de- creased	Normal	Normal	Normal
Galactose tolerance	created in urine in 5 hours after oral administration of		Normal (early)	Normal (early)	Normal Normal
Albumin-globulin ratio	40 gm. 1.5:1 to 2.5:1	Reduced or inverted	Normal (early)	Normal (early)	Normal
Total serum protein Takata-Ara test on	6.4 to 7.8 gm. per 100 cc. Negative	Decreased in chronic hepatocel- lular disease	Normal (early)	Normal (early)	Negative
serum Cephalin-choles-	No flocculation	Positive	Negative	Negative	Normal
terol flocculation* Colloidal gold test on serum		Increased, grade 3 or 4	Normal (in- creased late)	Normal (in- creased late)	Negative
Thymol turbidity*	0 to 4 units			Negative	Normal
Zinz sulfate tur-	6 to 16 units	Increased		Normal	
bidity		Increased		Normal	Normal

^{*} Tests considered most valuable when results are considered in conjunction with the history and the results of physical examination.

sary operation. In many cases, the clinical picture will be inconclusive. In these cases. the liver function tests are not used to support the diagnosis but are employed to establish the diagnosis. This they will do in most instances. In such cases, the tests have proved invaluable. Finally, in a few cases the laboratory tests as well as the history and the results of physical examination will prove inconclusive. It is in these cases that surgical judgment and experience are invaluable, for surgical treatment may produce a cure when correctly applied or injury to the patient when ill advised. Unfortunately, surgical judgment cannot be acquired from the printed page or in the laboratory. It is best developed by experience and, in particular, by careful analysis of one's past errors.

CARCINOMA OF GALLBLADDER—

(Continued from Page 31)
2. As in the case of cancer generally, the etiologic factors are not known, but it is of significance that gall stones are found to be associated with Carcinoma of the gallbladder in about 80 per cent of the cases, and with Carcinoma of the extrahepatic bile ducts in 40 to 50 per cent of reported cases.
3. Except in rare instances, early diagnosis of these tumors is difficult and so is seldom made. Untreated the life expectancy after onset of the first symptoms, or from the time the tumor is discovered, is usually measured in months.
4. Palliation has been directed toward relief of jaundice and its associated complications, and toward pain. The results have not been encouraging either as to the relief of these symptoms or as to the prolongation of life. (Continued from Page 31)

the prolongation of life.

5. Complete primary resection, followed by secondary procedures for further search and removal of tumors, should raise both the cure and the survival rates. Final evaluation of various radical operations aimed at cure remains to be determined by those who use every available means to treat malignancy.

REFERENCES

REFERENCES

1. United States Public Health Service: Vital Statistics, Special Reports from 1948. Vol. 35, 1950.

2. Tragerman, L. J.: Primary Carcinoma of gall-bladder. California Med.: 78:431-437, 1953.

3. Warren, R. and Balch, F. G. Jr.: Carcinoma of the Gall Bladder. The Etiological Role of Gall-stones. Surgery 7:657, 1940.

4. Sheinfeld, W.: Cholecystectomy and Partial Hepatectomy for Carinoma of the Gallbladder with Local Liver Extension. Surgery 22: 48, 1947.

Hepatectomy for Carinoma of the Gallbladder with Local Liver Extension. Surgery 22: 48, 1947.

5. Sainburg, F. P. and Garlock, J. H.: Carcinoma Of The Gallbladder; Report of 75 Cases. Surgery 23: 201, 1948.

6. Graham, E.: The Prevention Of Carcinoma Of The Gallbladder. Ann. Surgery. 93: 371, 1931.

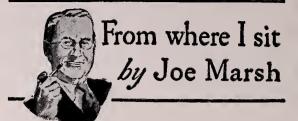
7. Kirshbaum, J. D., and Kozoll, D. D.: Carcinoma Of The Gallbladder and Extrahepatic Bile Ducts, a Clinical and Pathological Study of 117 Cases in 13,330 Necropsies. Surgery, Gynecology and Obstetrics 73: 740, 1941.

8. Marshall, J. M.: Tumors Of The Bile Ducts. Surgery, Gynecology and Obstetrics 54: 6, 1932.

9. Stewart, H. L.: Lieber, M. M. and Morgan, D. R.: Carcinoma Of The Extrahepatic Bile Ducts. Arch. Surgery 41: 662, 1940.

10. Mohardt, J. H.: Carcinoma Of The Gallbladder. Collective Review. Intnl. Abstr. Surgery.

der. Collective Review. Intnl. Abstr. Surgery. 121: 425, 1945.



The Missus **Keeps Posted**

Ever since our electricity was cut off last vear on account of me forgetting to mail in the payment, the Missus has been sort of leery about giving me letters to mail.

First, she'd ask if I mailed them, then double-check my coat at night. Then she stopped—and I figured she was sure I'd learned my lesson.

Then yesterday, I got a postcard at the office-from the Missus herself! It read: "Thanks, Joe, for mailing my letters." Well! Looks like she figured I still needed some checking-up and slipped that postcard in the last batch of letters

From where I sit, an occasional check-up is a good thing. Like a checkup on our tolerance, for instance. I promise not to tell you what beverage to drink or how to practice your profession. Now I like a glass of beer with supper, you may prefer tea—but if I try to switch you to my choice, please "address" me with a reminder of your rights.

Joe Marsh

PRESIDENT'S PAGE

The Constitution of the South Dakota State Medical Association states that "The Code of Ethics of the American Medical Association . . . are the principles of Medical Ethics of this Association, and are binding on its members and on its component societies" and that "a component society may expel, suspend, censure or otherwise discipline a member who fails to abide by the Code of Ethics of the American Medical Association."

It is interesting to note that some state medical associations have recently passed resolutions requesting deans of medical schools to make a course in medical ethics a required subject in the curriculum for candidates for the degree of doctor of medicine. Some of the county medical societies in the larger centers have indoctrination courses for new members. The Principles of Medical Ethics of the American Medical Association were revised recently, so perhaps a brief discussion

of the subject will be timely.



The first sentence in the Preamble states "these principles are intended to serve the physician as a guide to ethical conduct as he strives to accomplish his prime purpose of serving the common good and improving the health of mankind." Medical ethics as they apply to the practicing physician are not easy to define. Historically a profession is distinguished from an occupation or employment by the extent of learning required for its proper practice. The physician, the surgeon, the clergyman or the lawyer is not distinguished from the mechanic, the air pilot, or the farmer by his skill but by the extent of the knowledge and experience within which his skill operates. The distinction between the learned and the unlearned is an ancient one. Professions as bodies of learned men were early given or themselves assumed rights of establishing standards of entrance to and conduct in the profession. The earlier view that the laity was not fit to pronounce on standards within a profession has been maintained in leaving to various professions the right, within the law, to determine conditions of entrance to the profession, and to decide the standards of conduct of those who wish to remain in good standing in the profession.

The degree to which a profession is governed by its professional ethics represents the respect paid by the laity to the learning of the profession. A code of ethics, interpreted by practitioners, can be much more flexible than a code of law. Laws may often only prescribe limits to which a citiden can go without suffering penalties of the law. To be within the law is far short of measuring up a code of professional ethics. A code of ethics should be something to

be lived up to.

Professions which are lax in their professional ethics soon lose their privileges and eventually become subjected to rigid legal regulations. Medical ethics are intended primarily to protect the interest of patients. A Code of Ethics can only advocate precepts and principles to be observed in relation to various phases of practice. It cannot change a low-grade man into a high-grade doctor, but it can help a good man to be a better man. It can quicken a latent conscience, but not create one.

The Principles of Ethics of the American Medical Association are a guide for professional action. As the preamble states, in most instances "the physician who is capable, honest, courteous, and an observer of the Golden Rule, and who conducts his affairs in the light of his own conscientious interpretation of these principles, will find no difficulty in the discharge of

his professional obligations."

Numerous articles derogatory to physicians appearing in popular magadines have brought harm to the public and to the medical profession by undermining the confidence of some patients in their physicians. In these days of criticism of the medical profession, it might be well for every one of us to re-read the Principles of Medical Ethics of the American Medical Association, and to be certain in his own mind that he lives up to its ideals.

DEDICATION PROGRAM

MEDICAL AND SCIENCE BUILDING UNIVERSITY OF SOUTH DAKOTA

Saturday, March 27, 1954

Saturday, March 27, 1954			
Morning Program		Slagle Auditorium	
10:00 A.M.	Invocation	The Rev. G. T. Fattaruso	
		President I. D. Weeks	
		Honorable Sigurd Anderson	
		Governor of The State of South Dakota	
	Response	Regent E. M. Mumford Chairman, Regents of Education	
	KEYNOTE ADDRESS		
	"Title to be Announced" by		
	Dr. Edward J. McCormick, President		
	America	American Medical Association	
	Benediction	The Rev. G. T. Fattaruso	
12:00 Noon	Luncheon	Julian Hall	
1:00 P.M.	Scientific Exhibits	Medical and Science Building	
Clinical Program		Slagle Auditorium	
2:00 P.M.	"Studies on Blood Volume, Red Cell Production and Iron Metabolism"		
	by		
	John H. Lawrence, 1	M.D., Director, Donner Laboratory	
	University of California, Berkeley		
	"Cancer of the Lung:		
	A Challenge t	o the Public and Profession"	
		by	
	Alton Ochsner, M.D., Director, Ochsner Clinic and Chairman,		
	Department of Surgery, Tulane Medical School, New Orleans		
	Clinical Program to be Followed by:		
	Presentation of Awards and I	Honors	
4:00 P.M.	Exhibits and Social Hour	Medical and Science Building	
6:30 P. M.	Banquet	Julian Hall	
		ota Medicine Men''	
		by	
		assell, Executive Director	
	The John and Mary	R. Markle Foundation, New York	
8:30 P. M.	Dance	Union Building	
	Sponsored by the Stu	dent American Medical Association	
		ay, March 28, 1954	
2:00 P.M.	_	Medical and Science Building	
	Lay Public and	d Visiting Guests Are Invited	

Wives and families of physicians and guests are cordially invited to attend the Dedication Program. Special entertainment will be arranged for those who would not be particularly interested in attending the clinical addresses the afternoon of March 27.

Dedication Program Clinical Speakers

ALTON OCHSNER, M.D.

Dr. Alton Ochsner was born at Kimball, South Dakota, May 4, 1896. He received the Bachelor of Arts degree from the University of South Dakota in 1918, and received the Medical degree from Washington University School of Medicine at St. Louis in 1920. Doctor Ochsner received the honorary Degree of Doctor of Science from the University of South Dakota in 1936. He served as medical intern and assistant resident at the Barnes Hospital, St. Louis, transferring for surgical internship to Augustana Hospital in Chicago. He served as an exchange surgical assistant in Zurich and Frankfurt, Germany. He entered surgical practice in Chicago in 1925 and was appointed to the staff of Northwestern University as instructor in surgical pathology. He transferred to Wisconsin as assistant surgeon at the Wisconsin General Hospital, Madison, and was appointed assistant professor of surgery at the Medical School, University of Wisconsin, Madison.

In 1927, Dr. Ochsner became Director of the Surgical Section, Ochsner Clinic, New Orleans, and was appointed Professor Surgery and Chairman of the Department of Surgery at Tulane Medical School. He served as the President of the Southern Surgical Association in 1944, and President of the Association of Thoracic Surgery and the Society of Vascular Surgery in 1947. Dr. Ochsner is co-editor of the book "Lewis" Practice of Surgery and serves on the editorial board of International Surgical Digest and Archives of Surgery.

JOHN H. LAWRENCE, M.D.

Dr. John H. Lawrence is Director of the Donner Laboratory and Professor and Chairman of the Division of Medical Physics at the University of California, Berkeley.

Dr. Lawrence received the A.B. and D.Sc. (honorary) degrees from the University of South Dakota and the M.D. degree from Harvard University. He served his internship at the Peter Bent Brigham Hospital, Boston, and held residencies at the Strong Memorial Hospital, Rochester, New York, and the New Haven Hospital, New Haven, Connecticut. From 1934 to 1937 he was on the faculty of the Yale University School of Medicine. Dr. Lawrence came to the University of California in 1937 to develop the new field of isotopes in medicine and to set up a program of radiation protection in the Radiation Laboratory of the University and was the first to use artificial radioactive isotopes in medicine.

His chief fields of research are biological effects of radiation, isotopes in clinical and experimental medicine, high altitude physiology, and metabolism of normal and cancer tissues and of diseases of the blood. His contributions include a successful treatment for polycythemia vera, and with his associates he has helped to clarify the nature of the anemia occurring in leukemia and cancer. The Donner Laboratory, organized by him, has trained many M.D.'s and others in this field.

In 1950 he organized and led an expedition to Peru to study the effects of high altitude on a group of natives living at altitudes of 14,900 feet in the Andes and to study the relation of various blood conditions found there to diseases of the blood found among sea level dwellers. These studies were continued in a second expedition to Peru in 1952, at which time the life span of the red blood cell and the changes in body water at altitude were also investigated.

Dr. Lawrence has been awarded the Caldwell Medal (Chicago 1942) and the Davidson Medal (London 1947) for his contributions to medicine. He was the William H. Welch Lecturer (New York 1949), the Ludwig Kast Memorial Lecturer, New York Academy of Medicine (1949); the Roger Morris Lecturer (Cincinnati 1951); and the Aaron Brown Memorial Lecturer (Seattle 1951). He is a member of Phi Beta Kappa, Sigma Xi, Alpha Omega Alpha, the American Society for Clinical Investigation, American Federation for Clinical Research, Society for Experimental Biology and Medicine, American Association for Cancer Research, American Medical Association, and the European Society of Haematology. In 1953 he flew behind the Iron Curtain to treat Cardinal Stepinac who is imprisoned by the Communists.



WORKMEN'S COMPENSATION

For the past four sessions of the legislature efforts have been made to liberalize Workmen's Compensation benefits, particularly in the area of medical, surgical and hospital coverage. Some of these efforts have been successful and today we have limits of \$300 for medical and surgical care, and \$700 for hospital care.

A survey of laws in surrounding states shows that South Dakota is still being unrealistic about this facet of its benefits for working people. We agree that **most** cases fall within the limits, but the unusual case is all too frequent, working a hardship on the patient and forcing the doctor to give services at reduced or no fees.

In Minnesota, no limit is set on total doctor and hospital bills as long as they are comparable with fees charged private patients in the same income class.

In Colorado the limit is set at \$1,000 plus cost of braces, prostheses, etc., but, not limited as to the division between hospital and doctor. Fees paid are based on an approved fee schedule.

In Iowa, top limit is \$1,500 in ordinary cases, 500 medical and surgical and \$1,000 for hospital. However, in unusual cases, the industrial commissioner may extend limit another \$1,000.

In Wyoming, where the State maintains its own insurance, no limit is set but payments are made on an approved fee schedule.

Nebraska, also with a fee schedule, requires the employer to be liable for all reasonable medical and hospital services and medicines subject to the approval of the compensation court.

North Dakota also operates on a fee schedule but information on limits was not available at this writing.

The obvious result to be arrived at by information provided by the surrounding States is that South Dakota is still behind the times in its approach to the problem of adequate workmen's compensation coverage.

G. P. CHEST SYMPOSIUM

The third annual Symposium on Tuberculosis and Other Chronic Pulmonary Diseases for General Practitioners will be held in Saranac Lake, New York from July 12 through 16, 1954. It is approved by the American Academy of General Practice for 26 hours of formal credit for its members.

The Symposium is sponsored by the American Trudeau Society, the Saranac Lake Medical Society and the Adirondack Counties Chapter of the New York State Academy of General Practice. The registration fee is \$40 for A.A.G.P. members and \$50 for non-members.

The scope of this year's Symposium has been broadened to cover chest diseases other than tuberculosis. Included in the course will be discussions of the diagnosis and treatment of nontuberculous pneumonias, pulmonary carcer, lung abscess, fungus diseases, bronchiectasis, sarcoid, cystic disease, emphysema, and the pneumoconioses.

THE MONTH IN WASHINGTON

Although the budget, defense and farm policy are monopolizing Washington headlines, Congress is paying more than casual attention to the health and social security fields. In these, as in other legislative areas, it has for its guidance a specific program, laid down by President Eisenhower in his various messages during the first few weeks of the session. The question now is whether this closely-divided Congress will have the time and/or the inclination to follow through on everything the Administration wants.

Before Congress settled down to its task, the President met with a group of American Medical Association leaders, who discussed with him the Association's position on several important pieces of legislation. Present at the White House meeting, in addition to Mr. Eisenhower and Sherman Adams, Assistant to the President, were AMA President Edward J. McCormick, Trustees' Chairman Dwight H. Murray, President-Elect Walter B. Martin, and Washington Office Director Frank E. Wilson.

Congress got into the health and welfare field with no waste of time. Within five days after Congress reconvened the House Interstate and Foreign Commerce Committee, under the chairmanship of Rep. Charles Wolverton (R., N. J.), began an exhaustive series of hearings on voluntary health insurance, further evidence that the Administration is determined to get some action in this direction.

Chairman Wolverton as long as four years ago was interested in legislation to help prepaid insurance programs extend their coverage and increase their benefits. In 1950 he incorporated his ideas in a bill, but it was not acted upon by the committee and was not revived until this year. Now the atmosphere is much more favorable for Mr. Wolverton's proposal. Not only is he chairman of the committee and his party in control of Congress, but his ideas have strong support from the Administration.

Basically the Wolverton idea is an FDIC for voluntary health insurance. In about the same way the Federal Deposit Insurance Corporation insures bank deposits up to a

certain limit, the Wolverton program would insure (or re-insure) various types of hospital, surgical, and medical insurance programs. The proposal is for the federal government to set up a national health insurance underwriting corporation. To keep the corporation going, the member plans would contribute a certain percentage of their gross receipts, possibly 2%.

With the national corporation underwriting unusual risks, the individual programs could offer catastrophic or "complete" coverage. By scaling individual premiums to the family income, the member plans also could offer protection to families with very low incomes. The national corporation would pay possible two-thirds of each subscriber's claim in excess of, say, \$500 or \$1,000 in any one year.

Another piece of legislation, receiving favorable attention, also would help families with their medical expenses — a proposed liberalization of income tax deductions allowed for medical expenses. Under present law, only that part of medical expense exceeding 5% of taxable income may be deducted. The pending legislation would drop this to probably 3 per cent, and raise or eliminate the maximum limit. In past years scores of bills pointed in this direction have been introduced. If this is incorporated in the general tax overhaul legislation, it is believed to have a good chance of enactment.

Secretary Hobby's Department of Health, Education and Welfare is firmly behind a proposal to have the federal government show more leadership in vocational rehabilitation of the handicapped. At this writing it is too early for any good indication as to whether physicians will be brought under social security. The Administration's bill would blanket in most self-employed groups, including dentists, attorneys, architects and farmers, in addition to physicians. Rep. Carl Curtis (R., Neb.), chairman of the subcommittee which investigated social security, apparently feels the same way. However, a substantial number of the members of the House Ways and Means Committee, which must pass on the

(Continued on Page 52)



This is your

MEDICAL ASSOCIATION

FINANCING HOSPITAL CARE RECOMMENDATIONS COMPLETE

The Commission on Financing of Hospital Care on January 17 announced its recommendations after completing the most comprehensive study of this subject made in this country.

The Commission's comprehensive recommendations to the public outline a broad program for strengthening and extending voluntary prepayment and for keeping the costs of hospital services as low as possible consistent with good standards of care.

Gordon Gray, Chairman of the Commission and President of the University of North Carolina, stated "the Commission, an independent non-governmental group, has studied the problems of families as well as hospitals." The Commission formulated its recommendations, according to Mr. Gray, "to point the way for effective voluntary action, with minimal participation by government, to bring hospital care within financial reach of all people."

"Our Commission was composed of 34 national leaders from the health professions, industry, labor and other groups," Mr. Gray said. "It has developed a significant

area of agreement which provides a basis for progress in communities throughout the nation."

The Commission's recommendations, based on a \$556,000 two-year study, are particularly significant at this time because of the increasing costs of hospitalization and the difficulty of certain segments of the population in paying for hospital care.

The Commission found that voluntary prepayment is an "effective method of financing community hospital services" which "greatly eases the burden of financing hospital care by making it possible to meet the cost through advance periodic payments of known amounts." "Its effect," according to the Commission, "is to reduce significantly the number of persons unable to pay for their care at the time of illness and the number for whom the community, through private or tax funds, must assume financial responsibility."

The Commission also found that "the financial stability of the voluntary hospital system is dependent upon the degree to which voluntary prepayment enables both the general public and the hospitals to meet their common problem of financing hospital care."

Funds paid to the voluntary prepayment hospital plans, the Commission emphasized, are a "public trust" and "methods to assure economy and maximum effectiveness in their use are a joint obligation of hospitals, physicians, prepayment agencies and the general public."

Stress is given in the Commission's recommendations to development of measures for keeping prepayment costs as low as possible by eliminating unnecessary admissions to hospitals and by reducing unnecessary use of hospital beds prior to active treatment. The Commission suggested prompt discharge of patients after medical need no longer exists and the curtailment of unnecessary use of hospital beds for diagnostic and other services which can be given on an ambulatory basis as effective ways to reduce the cost to the public of prepaid hospital care.

The commission found that "provisions for financing hospital care for persons receiving public aid are, in most communities, insufficient to meet the costs of necessary hospital care; and, in many communities, provisions for

financing hospital care for other marginal income groups are non-existent."

The Commission emphasized that, "If such groups as the aged, the unemployed, the disabled and low income, as well as public aid recipients, are to have access to needed hospital care, not only must additional funds be made available, but creative and imaginative approaches to financing and administration must be developed."

RAY C. OLDING IS NEW HEART EXECUTIVE

Ray C. Olding, Redfield, former instructor at the University of South Dakota was appointed full time executive-secretary of the South Dakota Heart Association on January 1st. He replaces John C. Foster, executive-secretary on a part-time basis for the past three years.

Olding will use the Medical Association office as his headquarters until after the February fund drive is completed.

Doctor D. L. Kegaries is president of the Heart Association which is an affiliate of the American Heart Association.

NEWS NOTES

The Sixth Annual Symposium on Venereal Diseases will be held in Washington April 29-30. Information on meetings now available from USPHS, Washington 25, D. C.

Executive-secretary, J. C. Foster spoke to the Winner Rotary Club on January 7th at the request of Dr. Robert

Hayes of that city.

* * *

A committee made up of R. G. Mayer, M.D., F. D. Gillis M.D., and John C. Foster met with representatives of the North Dakota State Medical Association in Aberdeen on January 16th to discuss plans for a two-state medical meeting in 1956.

The Board of Medical and Osteopathic Examiners met in Sioux Falls, January 19-20.

Dr. Warren S. Peiper has located in Mitchell specializing in Radiology.

SEVENTH DISTRICT SEES FILM ON PLASTIC SURGERY

A film on "Vaginal Plastic Surgery" followed by a discussion by **Dr. Fred Stahmann** was the feature of the January meeting of the Seventh District Medical Society in Sioux Falls, Tuesday, January 5th.

The meeting, first of the new year, was presided over by the newly elected president William F. Sercl, M.D., Sioux Falls.

MYERS SPEAKS AT ABERDEEN

The Aberdeen District Medical Society held its regular monthly meeting in the Mexican Room of the Sherman Hotel on Wednesday, evening, January 6th.

Following dinner and a brief business session, Dr. J. A. Myers of Minneapolis gave a talk on "The Medical Profession and Eradication of Tuberculosis."

USD MEDICAL NEWS

Dean Hard has recently announced the recipients of the Pfizer Medical Scholarship Fund awards. The recipients are: Victor Holm, Sioux Falls \$350.00; Forestine Weller. Vermillion \$350.00; Robert McKillop, Sioux Falls \$300.00. The Charles Pfizer & Company of New York has given for the second year a \$1,000.00 scholarship fund from which these awards are granted to South Dakota students. Recommendations for the recipients of the awards are made by a faculty committee and such factors as financial need, accomplishment medical study, and fitness for medical practice are evaluated in making the selection from a number of applicants for the medical awards.

* * *

The Student American Medical Association was favored by an address from Doctor L. J. Pankow, Sioux Falls, on January 13, 1954. Doctor Pankow's topic of "Ethics in Medical Practice" was very warmly received by the medical student body.

Total contributions for the calendar year 1953 to the American Medical Education Foundation designated for the South Dakota School of Medicine total \$4,213.75. It is very interesting to observe that there are 13 "Century Club Members" and 20 "Half Club Members." Century Wouldn't it be fine to recognize a "Grand Club" (no pun intended) for the present calendar year. Worthy of special attention is the receipt of \$750.00 from the Huron Clinic in the support of research scholarships for medical students. This program established in 1946 has resulted in a number of medical students completing requirements for the Master's degree and through their efforts a number of scientific publications have resulted from the research represented in the thesis requirement for the degree.

* * *

Five departments of instruction within the medical school recently received approval from the Graduate Faculty, the University, and the Regents of Education to permit these departments to offer graduate programs leading to the Doctor of Philosophy Degree. This will mark essentially the first time within the state that any institution has offered graduate instruction at this level. An extreme shortage in many of the basic science fields of study of adequately trained personnel for teaching and research positions is existent throughout the country. It is felt that the several departments within the medical school can make a forthright contribution in providing opportunities for advance graduate study to qualified students of this state.

CLINICAL CONFERENCE SET IN CHICAGO

The Annual Clinical Conference of the Chicago Medical Society will be held at the Palmer House in Chicago on March 2nd through 5th. The Conference is designed to bring physicians new resources to meet their prob-

lems in every-day practice.

A faculty of twenty-four speakers will present half-hour lectures, three of these lectures will be devoted to a Symposium on Hypertension. Another group of authorities will participate in panel discussions and a clinicopathologic conference.

Daily teaching demonstrations will be held and large screen color television will be used. All physicians are invited to attend.

PUBLIC HEALTH FELLOWSHIPS NOW AVAILABLE

The National Foundation for Infantile Paralysis announces the availability of a limited number of postdoctoral fellowships in the field of public health and preventive medicine. The purpose of these National Foundation fellowships is to prepare physicians to fill the many vacancies existing in public health and preventive medicine, with priority to those who are interested in entering the teaching field.

The fellowships are for one or more years at an approved school of public health, with a period of field experience when arranged by the school. Stipends to Fellows are based on the individual need of each applicant. Fellowships may cover tuition, maintenance and an allowance for books, if required. Appropriation of \$320,600 in March of Dimes funds have been made to cover the cost of the program.

POLIO GROUP LIST FELLOWSHIPS

The National Foundation for Infantile Paralysis an-

nounces the availability of a limited number of postdoctoral clinical fellowships in physical medicine and rehabilitation to candidates who wish to become eligible for certification in that field.

Fellowships will cover a period of one to three years at training centers which have been approved for residencies in physical medicine and rehabilitation. Stipends to Fellows are based on the individual need of each applicant. Appropriations of \$475,000 in March of Dimes funds have been made to cover the cost of the program.

Eligibility requirements include United States citizenship, graduation from an approved school of medicine, completion of at least a one-year internship in an approved hospital, and a license to practice medicine in at least one state. The age limit is 40.

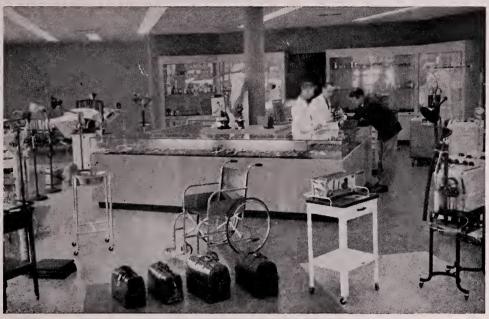
EUROPEAN MEDICAL

The California Medical Association has announced that their First Annual Grand Medical Tour of Europe will be open to practitioners from all states. Medical meetings planned by European governments and medical associations will be visited and expert interpreters will be available at all times. The tour will run from April 5 to May 5, 1954 and will cover France, Italy, Belgium, England, Holland, Germany, and Switzerland.

For Reservations or information contact California Medical Association, 450 Sutter Street, San Francisco 8, California.

Whenever You Are In Sioux Falls

Be Sure and Visit Our New Store . . .



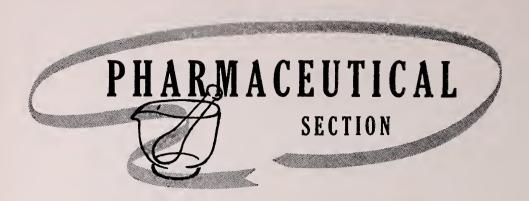
Complete Line of Equipment, Supplies and Drugs

KREISER'S Inc.

21st & Minn.

Sioux Falls, S. D.





ANIMAL HEALTH PHARMACY* Kenneth Redman, Ph.D.**

A little over a year ago we established a course in Animal Health Pharmacy for senior students in the Division of Pharmacy at South Dakota State College. Such topics as insecticides. rodenticides, fungicides, remedies, livestock remedies and the care of pets are studied. The course has three main objectives: (1) To instruct the pharmacist to scientifically render a cooperative service with the veterinarian in the therapy and control of livestock diseases; (2) To enable the pharmacist to manufacture preparations in the store when necessary or otherwise desirable; and (3) To enable the pharmacist to supply the correct insecticides, rodenticides, disinfectants, and other products for pest control.

Need for dealers — In 1951 the inventory value of South Dakota livestock was \$677,-229,000 and the income from the livestock was \$440,860,000. The total South Dakota farm income from all sources, including livestock was \$1,582,785,000 or an average income of \$23,855 per farm. The total farm income in South Dakota for 1924 was \$223,296,000 and for 1944 was \$369,244,000. On a national basis a total of \$156,300,000 of livestock remedies were sold, of which 33% was sold in drug stores. The estimated potential sales of these products for each drug store in South Dakota in 1951 was, thtrefore, \$18,114. Much depends on the training and experience of the personnel in the drug stores as to whether this potential is being reached. It was with the hope that our graduates could be of greater service in

*The first of a series of articles concerning the role of the pharmacist in the field of animal health.

**Professor and Head of the Department of Pharmacognosy, Division of Pharmacy, South Dakota State College. this increasingly important department in South Dakota drug stores that our course was established.

Insects and insecticides — According to the Federal Insecticide, Fungicide, and Rodenticide Act of 1947, "The term 'insecticide' means any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any insects whch may be present in any environment whatsoever." According to an interpretation of the Act, allied classes such as spiders, mites, ticks, centipedes and wood lice are considered as insects and, hence, any substance used to control them would also be considered an insecticide. However, "products intended solely for use against snails, slugs, earthworms, nemas, and worms infecting animals are not insecticides — within the meaning of the law--." From the entomologists' point of view insects have paired, jointed appendages and are often restricted to those animals having six legs.

It is rather well known that insects are often carriers and are the cause of the transmission of disease. Humans and other animals are often infected by the bites of such insects as mosquitoes, rat fleas, and ticks, and such plant diseases as melon wilt and dutch elm disease may be transmitted by insects. Other insects, such as flies and roaches may mechanically carry diseases to man and foodstuffs so that it becomes unthinkable in modern society to tolerate such insects.

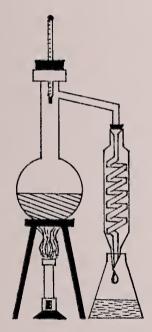
What should one know in order to sell insecticides? Fundamentally, it can be said that the dealer should thoroughly know himself, his products and the needs of his customers.

By knowing oneself is meant knowing one's responsibilities to the store and to the customer and having the full confidence to carry them out. With respect to knowledge of insecticides and the needs of customers, the dealer must be able to recognize the type of insect causing injury, the best insecticide to be used against the insect, and how it may best be applied for maximum control.

To better appreciate the insect problem, it can be said that there are more species of insects on earth than all other animals and all plants combined. Insects were in existance millions of years before man, and so we must consider ourselves as the intruders. Insects seem to reflect this attitude, too, for they will continue to chew or bite or suck until killed or otherwise incapacitated. They never take a hint, as we all know from our experiences with mosquitoes, gnats, and flies. It has been said insects annually nullify the labor of one million men in the United States, and in spite of all our efforts and newer knowledge, insects annually cause an economic loss of several million dollars in this country. Only recently the U. S. Department of Agriculture has announced a new policy of greater emphasis on the study of life habits of insects and less attention to insecticides to better fight our continuous war against these pests.

(To be continued)

RECENT PHARMACEUTICAL SPECIALTIES



The following is an abstract of recent nomenclature decisions of the Council on Pharmacy and Chemistry, American Medical Association, and a report on dermatological preparations of antihistaminics.

NEW GENERIC AND BRAND NAMES RECOGNIZED BY THE COUNCIL

Protoveratrines A and B for the purified mixture of the ester alkaloids, protoveratrines A and B, derived from Veratrum album:

Veralba (Pitman-Moore Company)

Protoveratrine A and B Maleates for that salt of the ester alkaloids, protoveratrines A and B: Provell Maleate (Eli Lilly & Company)

Rauwolfia for the powdered whole root of Rauwolfia serpentina: Raudixin (E. R. Squibb & Sons)

Trihexyphenidyl Hydrochloride for 3-(1-piperidyl)-1-phenyl-1-cylohexyl-1-propanol hydrochloride: Artane Hydrochloride (Lederle Laboratories Division)

DERMATOLOGICAL PREPARATIONS OF ACCEPTED ANTIHISTAMINE DRUGS OMITTED FROM N.N.R.

At its annual meeting in 1952, the attention of the Council was focused on the problem of cutaneous sensitivity to the antihistamine drugs. It was recalled that a similar problem previously arose in connection with the topical use of the suffonamides and penicillin. This led the Council to withdraw its acceptance of topical forms of these anti-infective agents, because their therapeutic value is outweighed by the high incidence of sensitivity reactions and because they are effective against local infections when administered systemically. Accordingly, the Council authorized a restudy of the use of certain antihistamine creams and ointments that had been accepted for the relief of itching dermatoses, especially those having an allergic basis.

The opinions of some leading dermatologists from various sections of the country were polled on the following questions: 1. In your opinion are the reactions on the skin to the use of ointments and creams containing antihistaminic drugs few, frequent, or many? 2. State the preparations causing the most disturbance in your experience in practice and in the clinic. 3. Do you believe the adverse effects from these agents outweigh their usefulness?

The replies to these questions are almost unanimous in concluding: (1) that numerous cases of dermatitis have appeared coincidentally with the use of such preparations, (2) that although this has not been attributed to all of the antihistamine drugs, they are potentially capable of producing cutaneous sensitivity, and (3) that such adverse effects can be considered to outweigh their usefulness at the present time. The majority of those consulted indicated that they either have limited the use of these preparations, or have abandoned them entirely. Regarding topical therapy in general, the suggestion was offered that until all important drugs or those commonly used for internal (systemic) administration are proved to have a low index of sensitization, they should not be employed topically.

In accordance with the foregoing opinions of experienced dermatologists, based upon observations that have accumulated since topical forms of antihistamine drugs were accepted, the Council concluded that, although some of them apparently have been helpful in relieving certain types of pruritus, the risk of contact dermatitis now overshadows their possible efficacy for that purpose and that further evidence is required to establish their usefulness.

On the basis of the foregoing conclusions, the Council voted to discontinue the acceptance of dermatological preparations of all antihistamine drugs, to omit from "New and Nonofficial Remedies" all currently accepted products in that category, and to revise appropriately the affected N.N.R. monographs and the general statement on histamine-antagonizing agents.

ARMOUR LABORATORIES PRESENT THYTROPAR, NEW PITUITARY HORMONE

The long-term research program of The Armour Laboraories of Chicago, planned to make available eventually the various pituitary active principles, which has already given ACTH to the medical profession, now adds Thytropar to its list of achievements. Details follow:

New Product:

Thytropar

Manufacturer:

The Armour Laboratories of Chicago Description:

The highly purified thyrotropic principle of bovine anterior pituitary glands, free of significant amounts of other pituitary active principles. Thytropar is stable indefinitely at room temperature while in the dry state. It dissolves readily in physiologic salt solution and retains its potency in solution for at least four days, if refrigerated.

Form and Potency:

Thytropar is supplied as a sterile, lyophilized powder in 6 cc. vials containing ten U.S.P. Units of thyrotropic activity per vial, each unit representing the potency of twenty milligrams of the tableted preparation of the U.S.P. reference substance.

Indication and Dosage:

1. To help differentiate primary thyroid myxedema from that due to pituitary insufficiency.

A single intramuscular injection of ten units produces a consistent rise in the serum protein-bound iodine in myxedema of pituitary origin, but fails to do so in the thyroid type. Thytropar thus distinguishes patients whose condition is due to failure of pituitary stimulation of thyroid tissue from whose thyroid tissue fails to respond.

2. To intensify the effect of iodine-131 in the treatment of functional thyroid malignancy.

Thytropar, in a single ten-unit intramuscular dose, given before the iodine-131, produces a marked increase in the uptake of iodine in the thyroid tumor, thus increasing the concentration of radioactivity in the tumor tissue.

3. To shorten the course of acute thy-

roiditis. In this self-limited condition, which may last as long as eighteen months, ten units of Thytropar intramuscularly, given daily for three of five days, produced marked alleviation of symptoms in five of six patients. Four had mild relapses, and three recovered rapidly.

Caution:

If pituitary myxedema is suspected, Thytropar should be administered as cautiously as thyroid extract, to avoid precipitating adrenocortical insufficiency.

LIVE VIRUS CHOLERA VACCINE OUTLAWED

The State of Tennessee recently passed a bill outlawing the use of "hot virus" vaccines in the prevention of hog cholera. The law, intended to prevent the spread of the disease, will become effective January 1, 1954.

Cholera — the nation's number one hog killer — costs the American farmer an estimated \$50,000,000 every year. The disease, a highly contagious one causd by a virus, affects all breeds of hogs. It may be spread by any of the pig's body excretions and once symptoms of the disease appear the possibility of recovery is very slight. Control must, therefore, be attained by prevention and to do this with greatest safety is the goal of the new law.

The virus-serum method of hog cholera control (outlawed by the Bill) has as its basis the injection of live cholera virus capable of producing the disease — this is known as "hot virus." The virus, however, is offset by a simultaneous injection of serum that contains antibodies against cholera. The live virus gives the hog a light case of the disease, thereby setting up a lifetime immunity. Used properly, quality anti-hog cholera serum prevents the virus from giving the animal a full-blown case of cholera.

One of the troubles with this method is that the virus used might not be potent and only short immunity would result. If, on the other hand, the serum is not effective, the animals will die of hog cholera. It is also necessary to be sure that the dosage of serum and virus are accurate.

The chief disadvantage, though, is that a dangerous hot virus is being introduced into the farm lot. For several days after vaccination, pigs shed the virus in body excretions.

The deadly virus is, therefore, never eliminated and poses a constant threat.

The virus-serum technique was developed in 1908 and has, even considering its faults, saved countless pigs from hog cholera. However, cholera researchers have always realized that the method was far from being perfect. It was the only means of control and had to do until something better came along.

The goal of researchers, then, was to develop a safe vaccine.

Th search ended when, in 1951, after years of intensive research, scientists at Lederle Laboratories Division, American Cyanamid Company, developed and produced a practical, safe vaccine. They succeeded in making 'hot' cholera virus grow in rabbits. This adaptation to an unnatural host caused the virus to modify or "cool off," so that it could not cause hog cholera in swine. A single injection — without serum — gives the hog complete, safe immunity against the disease for at least two years. The Lederle product, Rovac hog cholera vaccine, has been used with successful results since 1951.

By outlawing the use of live, hot virus for vaccination, the State has made it illegal to use any vaccine other than one that has been modified.



Division of Pharmacy Display booth stressing areas in which pharmacists perform public health services.

PHARMACY EXHIBIT

A display on the profession of pharmacy was exhibited in 25 South Dakota towns re-

cently. The display was part of a traveling exhibit sponsored by the Extension Service of South Dakota State College in cooperation with the various teaching divisions of the college.

Featuring the theme, "Guarding Your Health," the booth was composed of articles centering around the areas in which services are performed by pharmacists in the maintainance of good community health. Those areas are prescription compounding, baby health, sick room, first aid, pest control and animal health supplies.

Members of the Division of Pharmacy Staff and **Mr. Charles J. Dalthorp**, Administrative Assistant accompanied this exhibit.

PHARMACEUTICAL INSTITUTE

The Annual Pharmaceutical Institute will be held at South Dakota State College, Monday, Tuesday and Wednesday, April 5, 6, 7, according to Dean Floyd J. LeBlanc of the Division of Pharmacy.

The Institute is sponsored by the Division of Pharmacy and the State Pharmaceutical Association in order to provide up-to-date information on new trends in pharmacy and drug store operation for the pharmacists of the State.

The program will include members of the pharmacy staff and two or three outside speakers of prominence in the profession. A tour of the newly finished facilities of the Division of Pharmacy will be provided. A banquet will be held Tuesday evening in the Union Building. The registration fee will be \$5 which includes a ticket to the banquet. Registration will be held in Room 303 of the Union building from 1:00-1:30 Monday, April 5 with the program starting promptly at 1:30. Make your hotel reservations early and plan to attend this meeting.

A detailed program will be mailed to every drug store in South Dakota sometime the early part of March.

ARLINGTON DRUG HAS NEW OWNER

Mr. John F. Nelson of Watertown has recently purchased the Miller Rexall Drug in Arlington. Mr. Nelson was formerly a pharmacist in the Haggar Drug at Watertown. A graduate of State College, Division of Pharmacist in the Haggar Drug at Watertown.

macy, Nelson will establish residence with his wife and two daughters in Arlington as soon as housing is available.

The Millers have operated the drug business in Arlington for the past three and onehalf years.

APhMA URGES ADOPTION OF U. S. DRUG STANDARDS BY WHO

Membership of the American Pharmaceutical Manufacturers' Association has passed a resolution urging the U. S. Government officially to request the World Health Organization (1) to adopt standards that are in harmony with high standards prevailing in the U. S.; (2) to refrain from any action that will lower U. S. drug standards or create a conflict with them; and (3) to revise its procedures in order that all interested organizations in the U. S. may review and be heard upon any proposed drug standards before they are adopted by WHO as recommendations.

HOUSTON, TEXAS HOST TO NARD

Houston is the greatest industrial metropolis 56th annual convention of The National Association of Retail Druggists and it will be held October 10th through the 14th. The business sessions and the drug show will be in the Coliseum.

The Coliseum provides excellent facilities for a convention and there are more than twenty hotels and a large number of motels to insure adequate accommodations. Then in addition the hospitality is significent.

Houston is the greatest industrial metropolis in the South. It is a major inland port located fifty miles from the Gulf of Mexico. Pleasant weather prevails in October. The temperature in the autumn averages 70 degrees. Houston is served by eight airlines and six railroads. Also it is easy to reach over good highways.

Mayor Roy Hofheinz assures the maximum possible of assistance to make everything pleasurable and profitable for the druggists in attendance at the 56th annual convention of the N.A.R.D. President John C. Flanagan of the Chamber of Commerce of Houston writes that Houston will leave nothing undone to insure an enjoyable experience for the members of the N.A.R.D. while they sojourn in Houston in October of 1954. The

Harris County (Texas) Pharmaceutical Association is jubilant over the acceptance of the invitation that the organization extended to the N.A.R.D. to hold the 56th annual convention in Houston. Executive Secretary C. J. M. (Max) Roesch of the Texas Pharmaceutical Association insists with unrestrained enthusiasm that "the druggists of Houston and the entire state will back the statements I made in Chicago as the appointed spokesman for the Harris County Pharmaceutical Association." "You can count on them to come through with the hospitality and the cooperation necessary to make it the biggest roundup of druggists in the history of pharmacy" he emphasized. "Less than that would be negative to the magnificent tradition of the Lone Star State."

THE NATIONAL ASSOCIATION OF RETAIL DRUGGISTS OBJECTIVES FOR 1954

- (1) To defend the principles and the institutions that make it possible for liberty to flourish in America.
- (2) To stimulate increased individual participation in politics among business people in general and the independent druggist in particular.
- (3) To continue to formulate and sponsor sound programs aimed to insure the survival of small business in the United States.
- (4) To encourage individual druggists to participate in community activities and national welfare projects of legitimate sponsorship.
- (5) To advance the profession of Pharmacy and the welfare of the independent drug store.
- (6) To continue our leadership of the organized activities in defense of Fair Trade.
- (7) (a) To oppose with determined and aggressive action every effort to destroy the protection provided by the federal statute against secret rebates, hidden discounts and other forms of price discrimination and, furthermore, (b) to support proposed measures introduced in Congress to strengthen the Robinson-Patman Act.
- (8) To resist every effort to repeal the Durham-Humphrey Act since the law has proved to be valuable and important to the

druggists, the medical profession and the public.

- (9) To support sound proposals to eliminate the unfair competition of nonprofit and taxfree organizations and institutions (such as cooperative health centers and hospitals) that operate drug store facilities.
- (10) To work with the other associations in the health field to bring about interprofessional relations that will serve to confine the respective practitioners of the several health professions to the limitations of the functions covered by the licenses they hold and also in compliance with their respective codes of ethics.
- (11) To oppose a national sales tax and other levies that would result in overheavy tax burdens on the retailers in general and the independent druggists in particular.
- (1) To make additional efforts to have the excise tax on the many products sold at retail collected at the source (meanwhile the manufacturers are asked (a) to indicate on the packages of the taxable products that the items are subject to the excise tax and (b) to place the exact amount of the excise tax on combination packages composed of taxable products and exempt items).
- (13) To request all pharmaceutical manufacturers to supply the druggists with comprehensive information on and a free package of every new drug before the physicians are detailed on the medication.
- (14) To do everything possible to bring about better understanding and closer cooperation with the wholesalers and the manufacturers in the drug field.
- (15) To expand further the facilities of assistance provided for the independent druggists to help them deal with the problems of competition that come from the invasions of non-drug outlets.
- (16) To continue to carry on a public relations program to enlighten the people nationwide on the importance of the drug store as a health center.
- (17) To urge the Medical Service Corps of the armed forces to give proper recognition of pharmacists in assignments of duties in the armed forces.
- (18) To encourage the pharmaceutical manufacturers to eliminate discrimination in prices that now favor physicians, dentists, hospitals and veterinarians.

- (19) To continue to seek solutions for the serious inventory overloads that result from pharmaceutical duplications.
- (20) To promote and extend the purposes of the John W. Dargavel Foundation.

INCIDENCE OF BLADDER TUMORS IN BRITISH DYE INDUSTRY STUDIED

It has been known for many years that workers engaged in the manufacture of dyestuffs were more liable to cancer of the urinary bladder than is the general population. This form of cancer was at one time called "aniline cancer."

According to a five year study made by the Association of British Chemical Manufacturers, the probability of death from cancer of the bladder is about 30 times greater for persons involved in the manufacture and use of alpha-naphthylamine, beta-naphthylamine, and benzidine, than for the general population.

Other materials used in the dyestuffs industry were investigated in the field survey which covered industrial data for over 30 years. Magenta (rosaniline) and auramine also cause an increase in the incidence of this type of cancer, however, aniline does not. Beta-naphthylamine was found to have exceptionally high toxicity, prompting 20 firms collaborating in ABCM's study to discontinue its manufacture.

In addition to the field survey, experimental work was done at Leeds University and the Chester Beatty Research Institute. A quantitative study was made of compounds excreted after beta-naphthylamine has passed through the body. The most important appears to be conjugates of 2-amino-1-naphthol. The possibility of a rough correlation between amounts of 2-amino-1-naphthol derivatives excreted and tumor susceptibility is also suggested.

Further problems to be investigated are the extent to which other amino compounds are metabolized by the body into o-amino-hydroxy compounds and whether such metabolites are carcinogenic; also, whether changes in the structure of 2-amino-1-naphthol lead to a loss of carcinogenicity.

The studies were described in "Papilloma of the Bladder in the Chemical Industry," published by the Association of British Chemical Manufacturers, 166 Piccadilly, London, W.1.

(Continued from Page 41)

MONTH IN WASHINGTON-

bill, are known to feel that compulsion should not be used on groups that do not want Old Age and Survivors Insurance.

From all indications available during the first few weeks of Congress, a showdown fight may be unavoidable on medical care for military dependents. Defense Department, with support from the President, wants dependent care extended and made uniform among the three services, with military physicians carrying as much of the responsibility as they can. Under the Defense Department plan, dependents who could not be taken care of at military installations would be allowed to obtain their care from private sources, with the government paying almost all of the cost.

The American Medical Association agrees with the Defense Department that all dependents should receive medical benefits as nearly uniform as possible. However, AMA contends that wherever possible dependents should use private physicians and private hospitals, and that the military personnel and facilities should be employed only where civilian facilities are inadequate.



A RESORT HOTEL

The only resort in the state whose primary function is the accommodations of convention groups.

Moraine on the Lake

200 guest rooms ● 8 meeting rooms ● 3 dining rooms HIGHLAND PARK, ILLINOIS



RETROPNEUMOPERITONEUM AND ARTERIOGRAPHY IN UROLOGIC DIAGNOSIS

by
Oliver G. Stonington, M.D.
Denver, Colorado

The development of retroperitoneal air insufflation and aortography has extended the diagnostic armamentarium of the urologist and these procedures have become standard diagnostic tools to supplement intravenous and retrograde pyelography.

The introduction of air as a contrast medium in the perirenal tissues was first introduced by Carelli in 1920 and later emphasized by Cahill as an invaluable aid in the diagnosis of adrenal tumors. Although few reactions to the method of direct injection into the perirenal space were reported in experienced hands, a significant number of cases of air embolism, including a non-fatal case of the author, served to inhibit the free use of this procedure.

The fact that the retroperitoneal space is freely permeable to air from the coccyx to the neck enabled Ruiz Rivas of Madrid, Spain to develop the method of presacral retroperitoneal air insufflation.

Translumbar arteriography was first described by Dos Santos before the Surgical Society of Paris in 1929. Sodium iodide was used originally, but this proved to be too toxic, and the method did not become popular until the production of less toxic iodides such as 70% Diodrast, Neo-Iopax and Urokon.

Read at the meeting of the South Dakota State Medical Association, Rapid City, South Dakota, June 16, 1953.

From the Department of Urology and the Belle Bonfils Tumor Clinic of the University of Colorado, School of Medicine, Denver, Colorado. Both arteriography and air insufflation are valuable in delineating the renal mass and in differentiating cyst from tumor. In diagnosing enlargement of the adrenal gland, air insufflation is practically essential. And in estimating the functioning blood supply of a kidney or the position of ectopic vessels, arteriography may be of great help.

Technique

The presacral method of air injection is extremely safe. Rivas stated that in none of his many cases, had he withdrawn blood on aspiration of the needle, and this is born out by the fact that there are no large vessels in this area. I could find no incident of air embolism by his method in the cases reported.

In over 3500 cases of translumbar aortography, there have been no reported fatalities since the abandonment of sodium iodide.

Presacral air insufflation and translumbar aortography have now been used in approximately 100 cases each, in the Hospitals of the University of Colorado, School of Medicine. No. 18 or 19 guage spinal needle is used for the air injection. With the patient lying on his right side (Fig. 1) the operator stands on the side of the table facing the patient. The left forefinger is then inserted into the rectum and the tip of the coccyx indentified. A skin wheal is raised just distal to the tip of the coccyx using 1% Procain, and then the deeper tissues are infiltrated. The spinal needle is then inserted so that its tip passes through the recto-coccygeal ligament and slides up just anterior to and hugging the

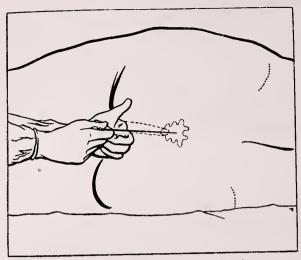


Figure 1. Site of insertion of needle in Retropnueumoperitoneum.

coccyx. It is somewhat startling to feel how close the needle is to the rectum, but seldom does one puncture the rectum, and if this happens the procedure is just discontinued for a day or two. When this has happened, no ill effect has resulted.

In an effort to simplify the method, we have not used a pneumothorax machine, and have used air instead of oxygen with no ill effect. Using a 55 cc syringe, a small amount of air is injected and if this seems to go easily with gentle pressure on the plunger, then the amount required is injected. We usually inject 300 cc with the patient on his right side. After waiting three minutes, the patient rolls over onto the other side, coming up onto his knees and over. This does not cause any disturbance of the needle. Another 300 cc of air is then injected with the opposite side uppermost. After waiting three minutes again, the patient is placed in the prone position and a picture than taken. Subsequent films are made as indicated with oblique positions, possible additional pyelography and or arteriography coupled with laminograms. The air seems to get well distributed in two hours.

It takes approximately two to three weeks to absorb the air. We have seen the air still present slightly at two weeks when surgery was performed, and in one large man in whom 1000 cc of air was injected on each side, subcutaneous emphysema was palpable in the neck for two weeks. A patient will occasionally get a choking sensation but this seems to disappear quickly.

We have only used the translumbar method

of aortography, though the method of retrograde cathetherization of the femoral artery appears to have some additional advantages. The blood flow in the aorta is so rapid that a sudden injection of a fairly large amount of contrast medium is necessary to delineate the vessels clearly. In an effort to obtain a larger bore needle with the same size outer diameter, Doss has designed an 18 gauge needle with a thin wall and a 17 guage lumen. It takes a surprising amount of force to inject the requisite amount of contrast material through a standard 18 bore, and I am sure that the new larger luman needles will be a great help.

The patient is placed on his abdomen on the x-ray table, and anesthetized with intravenous pentothal sodium. The procedure can also be done under local anesthesia, but with moderate discomfort. The needle is inserted four finger breadths to the left of the vertebral column (Fig. 2) just under the 12th rib.



Figure 2.
Site of insertion of needle in aortography.

The needle is passed up in the direction of the 12th lumbar vertebra so that it will enter the aorta above the celiac axis. The body of the vertebra is first encountered and then the needle withdrawn and further inserted anterior to the vertebra. The stilet is withdrawn before reaching the aorta and then the needle progressed a little at a time until it enters the vessel. The blood does not spurt from the



Figure 3.

needle but just drips rapidly. We then attach a piece of plastic tubing on the end of which is a syringe as shown in Fig. 3. At this point,



one can see the pulsation of the blood column in the tube and thus be sure one is in the aorta. On several occasions at the start, we injected the whole 12 cc of dye outside the aorta without ill effect and have repeated the procedure successfully a week later.

The contrast medium is injected as rapidly as possible into the aorta, and the first picture taken as the plunger of the syringe hits bottom. With the rapid cassette changer running at one film per second, we get the best renal vascular outline one second later. By the next second after the injection, the dye is all beyond the renal arteries and by the third second, the maximum opacification of the kidney parenchyma occurs. Thus, without a rapid cassette changer, the optimum time to get both the renal arteries and opacification is to take the first exposure just after the plunger hits bottom and the next picture as fast as one can put in another cassette.

Discussion

Figure 4 shows a normal aortogram, with good visualization of both renal arteries, and a comparative drawing next to it indicating the splenic and hepatic arteries. Figure 5 shows an aortogram with a hypernephroma of the right kidney, and a cyst of the left kidney. Note that the right kidney shows deposition of dye in the tumor, while the cystic

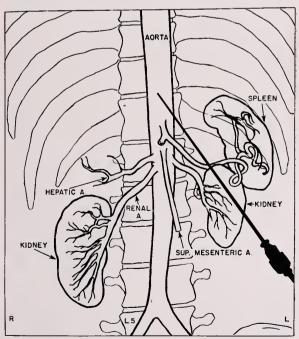


Figure 4.

Normal Aortogam with descriptive drawing.



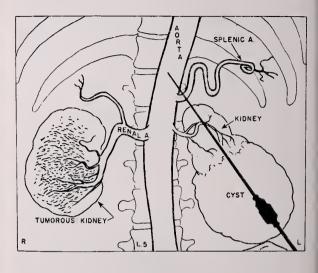


Figure 5.

Aortogram showing a hypernephroma of the right kidney and a cyst of the left kidney. Note "pooling" of dye in the tumor and no dye in the cyst.



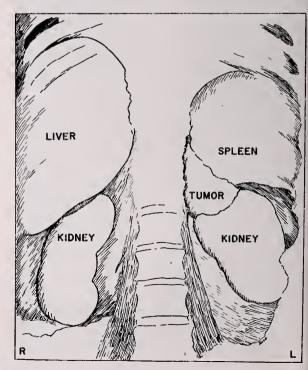


Figure 6.
Retropneumoperitoneum showing a left adrenal tumor.



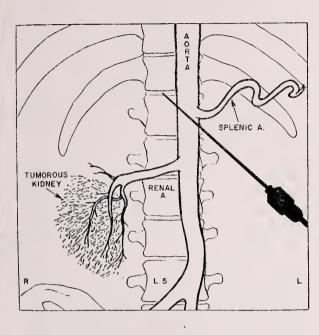
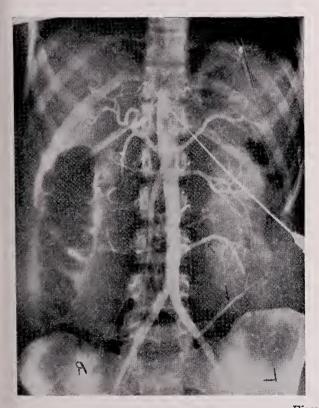


Figure 7.

Arteriogram showing a right hypernephroma, with dilatation of vessels in the kidney.



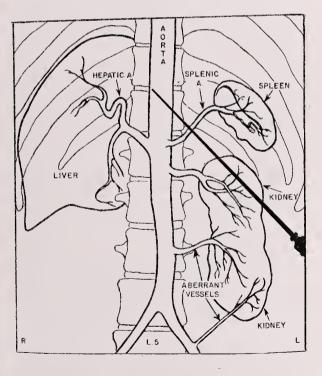


Figure 8.

Aortogram showing an enlarged left kidney with aberrant vessels, atrophic right kidney.

area at the lower pole of the left kidney is free of dye and thus avascular. This enabled the operator to decide on exploring the right kidney, when there was a mass in each. Figure 6 shows a presacral air insufflation in a female patient with masculinizing symptoms and well outlines a left adrenal tumor which could not be seen at all on the intravenous pyelogram. Figure 7 shows another right hypernephroma with "pooling" of the dye in the tumor. Figure 8 shows a congenitally enlarged left kidney with an ectopic blood supply.

In this group of presacral air insufflations, there were no major complications. An occasional patient complained of a choking sensation which soon disappeared and an occasional one a feeling of fullness with moderate discomfort in the abdomen.

In the series of aortograms, there were no complications, other than poor films due to misplacement of the dve. However, one patient died the day following the aortogram from a massive pulmonary embolus. Autopsy revealed no extravasation at the site of the aortic puncture, and the site of puncture itself was difficult to find. We feel that the death was not caused by the aortogram, though the venous embolus may have been shaken loose by the movement of the patient incident to the procedure.

SUMMARY

100 cases of presacral retropneumoperitoneum and aortography are presented. The safety and ease of both procedures are stressed, both in this experience and in the literature. Both procedures are valuable and should be done when it is thought that they might aid in the diagnosis.

BIBLIOGRAPHY

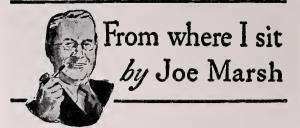
Cahill, G. F.: Air injections to Demonstrate the Adrenals by X-ray. J. Urol. 34:238-243 (Sep-

tember) 1935. Ruiz Rivas, M.: Roentgenological Diagnosis. Gen-Ruiz Rivas, M.: Roentgenological Diagnosis. Generalized Subserous Emphysema through a single Puncture. Am. J. Roentgenol. 64:723-734 (November) 1950.
Poutasse, E. F., Engel, W. J. and Root, J. Translumbar Aortography. Cleveland Clinic Quarterly. 18-19: 105-115 (July) 1952.
Smith, P. G., Rush, T. W. and Evans, A. T.: Technique of translumbar arteriography. J.A.M.A. 148: 255 (Jan. 26) 1952.
Doss A. K.: Recent improvements in Translumbar.

Doss, A. K.: Recent improvements in Translumbar Aortography. J. Urol. 68: 950-952 (December)

Smith, D. R., Steinbach, H. L., Lyon, R. P. and Stratte, P. B. Extraperitoneal Pneumography. J. Urol. 68: 953-959. (December) 1952,

Peirce, E. C. and Ramey, W. P. Renal Arteriography. Report of a percutaneous Method using the Femoral Artery Approach and a Disposable Catheter. J. Urol. 69: 578-585. (April) 1953.



Wish I'd Said That

You know Miss Perkins, Well, she's been driving her own car around our town for a little more than 30 years.

The other day she had a bit of trouble parking down on Main Street. Didn't guite make it the first try, so she pulled out to start over when a fellow waiting to pass started tooting his horn impatiently.

On the second try, she was still having a little difficulty, so this smart aleck behind her hollered, "Lady, do you know how to drive?" "Yes, young man," Miss Perkins answered, "I do. But I don't have time to teach you right now."

From where I sit, it's not always easy to have a good answer ready just when you need it. But when somebody tells me how to practice my profession, for instance, or to choose tea instead of a temperate glass of beer I like with dinner, I know the answer. We all have a right to our own ideas . . . and none of us like "backseat driving" from anybody.

Joe Marsh



ADDITIONAL CONCEPTS IN DIABETES MELLITUS by John H. Fodden, M.D., Department of Pathology School of Medical Sciences

Vermillion, S. D.

One remembers with amusement and commendation the reply of a medical student colleague, a physiology honors graduate, when requested by his examiner in internal medicine to define diabetes mellitus. "It is clinical medicine's best example of a complex of enigmas," was his answer. And indeed, as it must have thus seemed before the insulin innovation, even more does it so appear today. It is doubtful if any other human ill exists which can compare with diabetes mellitus in providing such an illustration of the impotence of morbid histology and cytology to attach their evidence to a pathogenesis of disease so well supplied otherwise with data by natural experiment, clinical behavior, and therapeutic conduct. One can find details of patients who had suffered a diabetes resembling that of a departreatized dog, desperately in need of insulin, yet 'sensitive' to it; and others who have manifested the greatest tolerance to insulin, requiring large doses to control a pronounced glycosuria, and with little or no accompanying ketonuria. Then, confounding all correlation with these gross clinical patterns, one discovers the islet tissue in some cases revealed little else except minor hydropic degeneration of the beta cells; another group whose islets were so completely hyalinized or fibrous that their own nonfunction could safely have been supposed.

But this is only one of many examples which confound our reason; the proof of Minkowski's belief that the pancreatic islet tissue

secreted a hormone vital to normal carbohydrate metabolism also introduced many more. Yet, in 1922, what was an enigma or two between patient and clinician. Insulin was lifesaving, and diabetes was man without insulin; a finality as unequivocal and unassailable today as it was then. Mechanistics could come later in response to problem after problem, clinical variation after clinical variation. Anyone who had reason to doubt in 1922 that insulin was not the be-all and end-all of this symptom-complex is in a majority group today, with few adversaries for his beliefs. Physicians who have little occasion for clinica observation of the diabetic masses can learn from authorities such as Joslin, that diabetes mellitus is characterized by great diversity of clinical behavior, symptomatology, and therapeutic response. Himsworth's suggested classification of the diabetic patient into insulin-sensitive and insulin-resistant groups is over-simplification indeed, save in a greatly restricted sense. We all appreciate the dissimilarities in the conduct of the diabetic child and the elderly adult, and the greater and frequent difficulties in maintaining his wellbeing. Most of us have marveled at the tremendous insulin needs of at least one diabetic to reduce his hyperglycemia to more asymptomatic and safer limits from a level that was little different from, and not disconcerting to a fellow sufferer. We may even have questioned our ready blame of dietary indiscretions when insulin requirements have fluctuated unduly in some of our 'difficult' diabetic patients.

The Beginnings of a Modern Chapter.

Many years before the isolation of insulin and the attachment of its source to the beta cells of the pancreatic islet tissue, cytologic stain-technics had defined the cell constituents of this endocrine organ. The granular beta cells were plentiful and comprised the major component; the alpha cells were fewer in number and less constant in their position within each island. Cells that were proposed as transitional between excretory-duct epithelium and islet tissue were the least conspicuous.

During the many tests of insulin's action which naturally followed its discovery, several investigators noticed an initial but slight elevation of blood sugar to precede the anticipated fall. This phenomenom occurred after intravenous or intra-muscular injection of the extracted hormone. Murlin, 17 in 1923, named the 'impurity' he deduced to be present, 'glucagon'. As more and more proprietary insulin preparations became available this feature, in varying prominence, was noticed in all; one exception was the Danish insulin, 'Nova'. However, more than a score of years followed the insulin discovery before any credible suspicion was aroused that a substance other than insulin may be actively secreted by the pancreatic islet tissue, and that the alpha cells should be neglected no longer. Two major steps in medical progress led to this adjustment of thought; temporally, both were close together. One was in the field of human surgery, and total pancreatectomy became a technical and a therapeutic achievement; the other, from experimental pathology, introduced a relatively simple and selective means of destroying the insular beta cells with the ureide alloxan.4

Man without his pancreas confounded those who had anticipated huge insulin needs. His demands were far below Root's calculated estimate of 200-300 units a day. Indeed, he introduced the surprising element that the average daily 40 units were less than the requirements of a vast number of sufferers from naturally-occurring diabetes mellitus. However, his need, though small, was vital; without insulin ketosis was prompt and severe; his 'sensitivity' to the hormone was pronounced. Alloxan gave a high blood sugar,

sometimes disturbingly so to the observer, but with little or no outward show of discomfort by the animal. Glycosuria was prominent; ketonemia and occasionally ketonuria were detectable, but ketosis was not a feature. Insulin more often than not was unnecessary for the animal's well-being; it reacted slowly, and there was no sensitivity. Very large amounts were often necessary in attempts to disperse the glycosuria. When metabolism data like these were compared with those from the same alloxan diabetic animals after surgical extirpation of their pancreas, very significant alterations were noticed.²⁷ Hyperglycema and glycosuria decreased a little without the therapeutic use of insulin. The latter now became a necessity for life; ketosis upon ever-mounting ketonemia and ketonuria was never far behind its therapeutic withdrawal.

The explanation for these differences, then, seemed to be with the alpha cell, as fibrosis and atrophy, following duct ligation, had ablated the external secretory tissue of the pancreas. In 1948, two groups of investigators extracted an active factor from the pancreatic islet tissue with biological properties which seemed to be directly antagonistic to those of insulin. 15, 21, 22 Its electrophoresis pattern was different, and with other physicochemical distinctions, a separate autonomy was certain. Because of an ability to produce hyperglycemia when injected intravenously or intramuscularly, and a stimulatory effect upon the process of hepatic glycogen breakdown to glucose, it was named the hyperglycemic-glycogenolytic factor, or HGF. There is now an increasing tendency to use the old name, glucagon; this is unfortunate, as our accumulating knowledge of specific actions makes its classical connotation much less apt. A report some few months ago that this factor had been obtained in a pure crystalline form was unaccompanied by the method of this procedure, which, as far as I am aware, still remains unpublished.20 One remarkable feature of its detection and isolation was the presence of extractable amounts of an identical factor in the gastric and duodenal mucosa of many animal species. Cells which reside in the gastrointestinal mucosa and function like those of the islet tissue, still await definition. Claims of their recognition based upon histologic tinctorial and silverimpregnation procedures are worthless; 6.7.8 these technics have no specificity, and hence, no place in the proof of cell identity, either morphologic or functional. 10

Problems Existent and their Attempted Solution.

A major question still remains unanswered; whether or not this extractable factor is a hormone, having a specific action in the physiologic economy of carbohydrate metabolism. Requirements for the definition of a hormone are strict, and HGF does not fulfill them all.30 A control amount of the purified factor added to blood is destroyed at a rapid rate, and attempts to extract it from pancreatic venous blood have yet been unsuccessful.21, 22 Cross-transfusion experiments, suffering from intrinsic sources of error, are unreliable to quote as proof.9 The conclusion of Pincus, 18 that evidence for this factor's share in carbohydrate physiology is presumptive evidence only, is still valid.

A procedure which hormone investigation demands as evidence, if its performance can be reasonable anticipated, is the experimental withdrawal of any proposed hormone source. In many cases this is a simple surgical accomplishment, without the creation of a precarious and undependable final state. Examination of the consequent disordered physiology can follow; moreover, replacement therapy should restore the norm. Pancreatectomy for insulin's complete withdrawal is an exemplary instance; but, as a measure for experimental removal of all the hyperglycemic factor, must be considered inadequate. Thus, attempts have been made to copy the example of alloxan, and attain destruction of the alpha cell by chemical methods with the same selective quality shown by this compound for the beta cell.

Sodium diethyldithiocarbamate¹⁶ and cobaltous chloride^{14, 29} were two compounds recently used and believed to satisfy the requirements of a selective chemical noxa. The former, however, proved far from specific in its action; beta cell damage as well as indiscriminate islet-tissue hemorrhage made it worthless. Cobalt appeared to injure some but not all of the alpha cells, this numerical variation being sufficient to make the substance undependable. An interesting circumstance to be mentioned later, is, however, still attached to the behavior of cobaltous chloride

on the islet cells. Davis² observed that the compound.synthalin A (decamethylenediguanidine), caused degenerative changes within the alpha cells, and that hypoglycemia to convulsive coma and death resulted from its administration. We have used this compound in our work upon carbohydrate metabolism in rabbits and dogs, and amply confirmed Davis' findings. 11, 13 Moreover, we demonstrated that extracts prepared from the pancreas of animals treated with synthalin A lacked the hyperglycemic glycogenolytic factor; the hypoglycemic action of insulin remained undisturbed. 12 When the secretion of insulin had been previously destroyed by alloxan, such extracts were impotent of their biologic activity. Extracts of rabbit pancreas prepared after the animals had lived approximately 36-48 hours following intravenous cobaltous chloride surprised us with their hyperglycemic and liver-slice glycogenolytic potency. They were, instead of being weaker as we had expected, exaggerated much above the normal. We could only surmise until our planned experiments with radioactive cobalt were completed, that in some manner the element had increased the potency of the intracellular factor and/or inhibited its egress to a large extent from the swollen cells, permitting its intracytoplasmic accumulation. Synthalin A given to alloxan-diabetic rabbits brought about ketonemia, ketonuria and obvious lipemia; the quality of diabetes in this species was altered dramatically to that reminiscent of the pancreatectomy state. 11 Its attempted verification on the dog was hindered by a much greater acute and dramatic symptomatology, leading fairly quickly to death; a problem which, we believed, rather than being an unfortunate circumstance had broader implications. Certain clinical signs and pathologic findings subsequent to the downward trend of the blood sugar were impressive of an acute adrenocortical insufficiency.

The most interesting and outstanding problem of them all, however, brings us back close to the point from whence we started. If this factor should prove to be a hormone, how near will this knowledge bring us to an explanation of some of the aberrances of human diabetic behavior? When the extraction, and ideally quantitation, of this substance from pancreatic venous blood or systemic

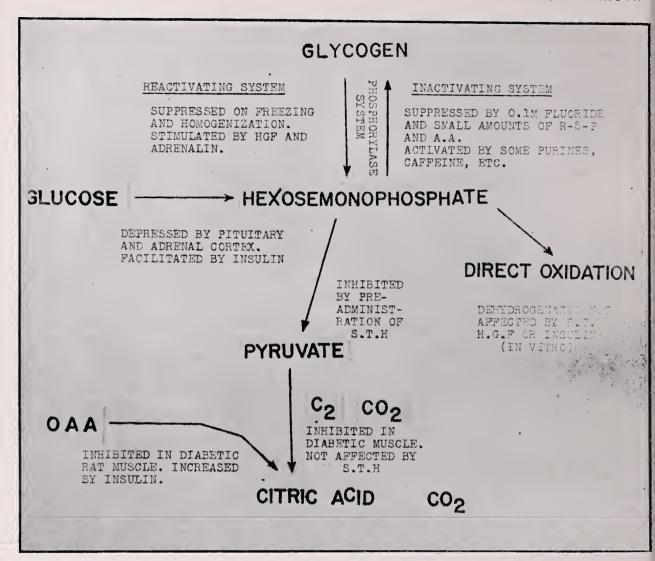


Figure 1.

Schematic representation of the hormonal interrelationships in the control of carbohydrate metabolism. (Modified from Dickens "Alternative routes of carbohydrate metabolism," Ciba Foundation Colloquia on Endocrinology, 1953.)

arterial blood is accomplished experimentally, the biggest step will have been made towards an answer. The technics thus learnt can be applied to the blood of the human diabetic. Schema of Hormone Relationships and Action Sites.

The final explanation of the grosser disturbances wrought by disease comes when understanding of the intrinsic, or chemocellular mechanisms is complete. The fascination of hormone studies lies, as it must, mainly within this field. Turner²⁸ sums up the broad problem: "Intricate interrelationships exist between the component glands of the endocrine system — many of the hormones are involved in manifold physiologic processes

within the body instead of being concerned only with the adjustment of one particular process." Familiarity with the gross effects of insulin, so apparent and dramatic as they are, is not reflected in our knowledge of its intrinsic action. Indeed, the chemical role proposed for it seems to me to be laden with bathos and humble insignificance; the inhibitor of an inhibitor of a single enzymechemical-energy reaction. Yet, its humoral 'final common pathway' is still the focus of controversy, the range and magnitude of which seems to assure the advent of more proposals. In rather similar manner, the hyperglycemic factor as yet is attached to one reaction and a solitary locus of activity; it is believed to serve as a stimulator, or 'booster' substance, in the recovery process of a 'spent' enzyme.23. 24. 26

The diagramatic Figure 1, which is Dickens'3 tentative scheme of hormonal interrelationships in carbohydrate oxidation, and representative of data from his own and the researches of Cori, 1 Sutherland, 25 and de Duve,⁵ presents very simply one nucleus of our comprehension of these humoral intricacies. The activity of enzymes as indispensable agents in the assembly of energyrich chemical molecules from glucose and phosphorus, is all important to carbohydrate oxidation. In liver tissue the enzyme phosphorylase is conditioned by two opposing influences. One of these, the depressive system, centers about another substance, possible enzymic which depresses or inactivates phosphorylase. This system may itself be inactivated, or inhibited by sodium fluoride, adenylic acid, and adenosine-5-phosphate. It is stimulated to active 'depressive' function by various purines, including caffeine.

The other influence, the reactivating system of phosphorylase, is very little understood. It is fairly clear that it has an autonomy separate from the aforementioned inactivating faction, and its purpose is not that of an influence playing upon the latter. HGF and adrenaline are proposed to exert their effects upon this activating system, and to shift the balance between the two major systems in favour of phosphorylase activity and recovery.

The growth, or somatotrophic hormone (S.T.H.) of the adenohypophysis is now under intensive examination. Its administration creates a hyperglycemia and also increases that of the insulin-deficient organism. Thus, the diabetic condition is made worse, the onset of ketosis is hastened, and without large doses of insulin to combat its effects, coma is the final symptom. The mechanism, or route of its action is disputed. There is evidence suggesting that it is through the intermediary of the alpha cell, speeding the secretion of hyperglycemic substance. Other beliefs deny the participation of this cell, and explain the pituitary hormone's effects as creating a greater demand by the peripheral tissues for insulin, a demand which can not be met by the diabetic organism. For reasons which will be recalled, it is clear that any

relationship which may exist between the pituitary hormone and the hyperglycemic factor can not be defined simply by surgical extirpation of the pancreas.

SUMMARY

Clear and accumulating evidence is outlining a role for the alpha cell of the pancreatic islet tissue in carbohydrate metabolism. This cell is charged with the production of a hyperglycemic factor, with a focus of biochemical activity upon the phosphorylase conversion of hepatic glycogen to glucose. There are reasons which suggest the regulation of its production by an anterior pituitary tropic hormone. However, concise definition of this substance as a hormone has yet to come, but is anticipated. It is believed that extraction techniques, when perfected, may reveal its presence in circulating blood. If this is so, work will be stimulated to explore its participation in human diabetic metabolism, and especially the beliefs that familiar aberrances in the clinical sphere of this condition are referable to the hyperglycemic factor.

*Due to shortage of space references will be found in reprints.



A RESORT HOTEL

The only resort in the state whose primary function is the accommodations of convention groups.

Hotel Moraine

200 guest rooms ● 8 meeting rooms ● 3 dining rooms HIGHLAND PARK, ILLINOIS



SURGICAL PATHOLOGY IN A SMALL GENERAL HOSPITAL

Critical Review*

W. J. HAGE, M.D., F.I.C.S. ARNOLD K. MYRABO, M.D., SIOUX FALLS, S. D.

A tabulation of surgical discharges during 1953 follows:

The service rendered by the surgical department of a small general hospital is extremely varied. A report outlining the scope, including a critical review of the quality of service in such a hospital was compiled for presentation to the staff and has been edited for the information of colleagues.

During the year 1953 there were 2618 hospital admissions to the surgical service at Mc-Kennan hospital. Of this number 14 expired; giving a surgical mortality of just over ½ of 1%. There were 1052 major surgical procedures and 2019 minor procedures.

A tabulation of surgical discharges during 1953 follows:

General surgery	887
Gynecology	385
Opthalmology	75
Otorhinology	475
Urology	149
Orthopedic	158
Traumatic surgery	414
Neoplasm	93
	2618

In the group, extensive procedures such as fore-quarter amputations for sarcoma of the humerus, radical resections of the entire floor of the mouth with the mandible for carcinoma of the floor of mouth, total cystectomies with transplantation of ureters and numerous radical breast, gastric and colonic resections, were done. A total of 118 surgical procedures

*From the Departments of Surgery and Pathology at McKennan Hospital, Sioux Falls, South Dakota.

were performed for malignant disease, two resulting in mortality.

Outpatient surgical procedures totaled 1732. None of these are included in the following analysis. A review of the particular surgical procedures is of limited interest and will be further discussed only as related to a pathologic entity. All tissue removed is routinely examined by a qualified pathologist and a written report filed.

The quality of work done on a surgical service is perhaps best reflected in a review of the histo-pathology. There were 118 appendectomies performed for specific disease. Of this group 76 were acute or 64.4%, 29 had evidence of chronic inflammation, 2 had metallic foreign bodies, 2 showed oxyuriasis and the remainder lacked significant pathologic findings.

One hundred nineteen gallbladders were removed, 95% of which showed definite pathologic changes, 16% were acute. Twenty two gastric resections were performed; 5 showed evidence of tumor, 4 being carcinoma and 1 a leiomyoma. Gastrict ulcers were present in 5, and 12 were removed because of duodenal ulcers. Thirteen specimens of thyroid tissue were removed; 2 were malignant, all were pathological. Seventy-nine examinations of breast tissue were done, all significant; 21 were malignant, a percentage of 26.5%.

The gynecological procedures divide rather easily into diagnostic removal of tissue and therapeutic removal of tissue. There were 96 examinations of cervical tissue; 7 of which showed malignant change, 2 showed carcinoma in situ. Of the 259 examinations of uterine contents, there were 137 that showed evidences of conception. In this group, 3 were hydatidiform moles, 2 showed phydatid change, 2 had evidence of erythroblastosis and 2 were placental infarctions. Six scrapings showed malignancies, 3 being endometrial sarcomas, 1 adenoacanthoma and 2 adenocarcinomas. This represented 2.3% of all uterine contents.

The therapeutic gynecological procedures included 72 hysterectomies. Ten were done for malignancy; 3 of these were sarcomas and 2 were squamous cell carcinomas of the cervix in situ. Thirty nine uteri were removed for fibroids. Twelve vaginal hysterectomies were done for uterine prolapse, 3 of these had endometrial polyps. Of the remaining pathologic diagnoses, there were 2 with adenomyosis, 2 uterine hypertrophy, 1 ruptured postpartum uterus, 1 ruptured cornual pregnancy, 1 hyperplastic endometrium, 1 chronic subinvolution, 1 chronic pelvic cellulitis, 1 associated with a bilateral ovarian endometriosis and 1 performed for prolonged bleeding, which showed microscopically only focal chronic myometritis.

Of the 29 partial or complete oophorectomies performed, 2 were malignant, 1 a metastatic adenocarcinoma and 1 a dysgerminoma. One bilateral papillary cyst-adenofibroma was noted and 1 tubo-ovarian abscess. Six had endometriosis, 3 fibromas, 1 dermoid cyst and 9 cyst-adenomas.

Fourteen salpingectomies were performed; 7 showed hydrosalpinx, 3 pyosalpinx, 3 ectopic pregnancies and 1 fallopian tube showed a small papillary carcinoma.

In the urologic field 8 nephrectomies were done; 6 for hydronephrosis, 1 for pyonephrosis and 1 secondary to trauma resulting in avulsion of the renal vein. Four renal stones were included separately. Portions of 40 prostatic resections were examined; 31 were benign. Of the 22% malignant, all were adenocarcinomas. Seven orchidectomies were examined; 2 seminomas, 2 atrophic testes, 2 acute and chronic epididymitis with abscess formation and 1 an ischemic necrosis due to torsion of the spermatic cord. There were 4 transitional cell carcinomas of the urinary bladder.

The ENT section submitted a total of 294 sets of tonsils and adenoids and an additional

57 pairs of tonsils. There were 9 separate adenoidectomies. Six enucleations were done; 3 with glaucoma, 1 traumatic injury, 1 an intraocular hemorrhage and 1 with a diagnosis of phthisis bulbi. There were 18 cataracts submitted.

Six specimens resulting from neurosurgery were examined; 3 sympathetic nerve trunks, 1 subdural hematoma, 1 schwannoma of the brachial plexus and a spongioblastoma of the spinal cord.

There were 87 specimens derived from the skeletal system; 2 of these were malignant, 1 a chondrosarcoma of the humerus and 1 an osteolytic sarcoma of the humerus.

Eighty examinations of skin and subcutaneous tissue were noted. In all there were 11 malignancies, a percentage of 13.8.

There were 19 lymph nodes biopsied; 11 showed evidence of malignancy, 3 of which were Hodgkin's and 8 metastatic carcinomas. Two of the inflammatory nodes were tuberculous.

Of the 14 post-operative deaths, 3 were the direct result of trauma and all were moribund upon admisson:

- L. M. Y. male, age 72, admitted 60 hours after falling from a horse, died of a ruptured duodenum with peritonitis, traumatic.
- **L. G. female,** age 27, extensive burns, first and second degree, died in shock within 12 hours.
- J. K. male, age 66, cerebral trauma with severe brain damage due to car accident, exploratory burr holes.

Four deaths were due to accidental complications, not directly related to surgery. They were:

- O. L. S. male, age 65, amputation of right leg for gangrene, death due to pulmonary embolism. Original pathological diagnosis: polycythemia vera.
- **B. M. female.** age 57, cause of death, pulmonary embolism on day of discharge, cholecystectomy.
- **G. K.** male, age 79, cerebral thrombosis, transurethral resection of prostate for carcinoma.
- **T. J. male,** age 68, multiple bladder stones, cause of death, embolism of right leg. The remaining deaths were as follows:
 - J. F. C. female, age 64, cause of death, oliguria and uremia secondary to cho-

lecystectomy associated with hepatitis.

E. H. male, age 58, cause of death, uremia, primary pathology severe cholangitis, surgical procedure; exploration.

I. Mc. female, age 72, cause of death, cardiac failure, surgical procedure; duodenal diverticulum, hiatus hernia, splenectomy.

P. S. male, age 11 months, exstrophy of bladder, cause of death; hydremia, subclinical nephrosis.

H. B. male, age 53, perforated diverticulum of the sigmoid with an abscess, severe emphysema, inflammatory small bowel obstruction; surgical procedure; drainage of abscess, exteriorization of perforation.

G. P. female, age 57, scirrhous carcinoma of entire stomach with regional metastases, peritonitis due to leak of entroanastamosis following total gastrectomy.

G. J. male, age 15 months, death due to asphyxia secondary to bronchial obstruction because of foreign body wth laryngeal edema; surgical procedure; emergency tracheotomy.

Casual observation of the work of a small general hosiptal fails to reveal the true nature or scope of the service performed. A critical review at the end of an appreciable period of time uncovers evidence of excellent care, careful judgment and broad understanding of human illness. Present day training standards, distribution methods, and aggressive attitudes on the part of the staff and the management of small general hospitals place within their scope the care of the vast majority of illnesses. Many of the procedures here detailed were, but a short time ago, limited to experimental and university centers. It is true that some procedures now experi-

mentally being developed, have not as yet penetrated to the level of such a hospital; however, a number of these experimental procedures will probably find a place in the armementarium of all general hospital staffs soon.

In view of the widespread newspaper and magazine publicity decrying unnecessary surgery and blatantly indicting small nonuniversity connected hospitals of such practices, it is relieving and refreshing to be able to present the foregoing analysis which will favorably compare with the work done in any hospital in the nation. This does not mean that the staff is satisfied with the quality of work done. Each death must be and is critically reviewed for errors in judgment, technique, and post-operative care. We are fully aware that only by such self criticism may we reduce the mortality and morbidity associated with surgical disease. It is evident that the surgical mortality rate is not the guiding feature in judgment. Nearly one-half of the surgical deaths were recognized to be heroic procedures but were the only procedures which offered the slightest chance for salvage. Unfortunately, we have been unable to present those cases which, heroically attempted, ended in a satisfactory discharge of the patient. These number, undoubtedly, as many as the surgical deaths.

SUMMARY:

A review of the surgical work done in a small general hospital, having 2,618 hospital admissions during the year 1953, is presented. Fourteen surgical deaths are reviewed. The pathology discovered and treated is enumerated. The results of private medicine, self-disciplined, whose primary aim is optimum patient care, are presented as a progress report and a base for future goals in this and similar institutions.

EDUCATION, LICENSURE DISCUSSED AT MEETING

How medical schools can best help meet postgraduate medical education needs was considered at the 50th Annual Congress on Medical Education and Licensure held in Chicago February 7-9. The meeting was sponsored by the AMA and the Federation of State Medical Boards.

A preliminary report of a survey on postgraduate medical education was the basis for three panel discussions. These considered the objectives of such education, how to achieve the objectives, and the faculty, facility and financial needs of such programs.

Speakers on the program included: E. J. McCormick, M.D., president of the AMA; Louis H. Bauer, M.D., past-president of the AMA; Frank B. Berry, M.D., Assistant Secretary of Defense; Frank G. Dickinson, Ph.D., AMA; and Aura E. Severinghaus, Ph.D., Associate Dean, Columbia School of Medicine.

Attending from South Dakota were: W. L. Hard, Ph.D., Dean of U. S. D. Medical School; J. H. Cheney, D.O., vice-president, Board of Medical and Osteopathic Examiners; and John C. Foster, executive-secretary of the Board of Examiners.

--- 66 ---



RECOMMENDATIONS OF THE ADVISORY COMMITTEE TO THE SUPERINTENDENT OF YANKTON STATE HOSPITAL

February 21, 1954

- 1. The committee feels that the present number and type of patients being handled in Yankton State Hospital warrant acute hospital facilities for proper care of acute non-mental illnesses of patients and for the more complete work-up and treatment of patients from the mental standpoint. This will lead to better over all care and ultimate return of more patients to normal life. It is recommended that the present hospital building nearing completion would serve well for this purpose and should be used as such.
- 2. A study of a considerable number of patients now committed to Yankton demonstrates a real need for a youth mental health program in this State. It is recommended that this problem best be studied and recommendations made by the Governor's Committee on Children and Youth. This recommendation has been forwarded to Dr. I. D. Weeks, Chairman of the Governor's Committee.
- 3. A need is evident for treatment centers at several locations in the State that many people would have treatment available while still continuing in a gainful activity remaining self-supporting in their own communities. This would prevent eventual committment and the much more expensive institutional care in the State Hospital in many cases. This type of program would also make it possible for many patients now at Yankton State Hospital to return to their homes and jobs,

- while continuing treatment resulting in a real saving to the State. In this connection, it is recommended that a governor's advisory committee on mental health be established to aid in developing this type of program.
- 4. It is felt that a definite differentiation must be made in this State between the mentally ill aged and the non-mentally ill aged. It must be emphasized that the only place where competent trained personnel are available for proper study and treatment of the mentally ill aged is at the State Hospital where excellent and sufficient housing is now available. Problems of the aged and physically ill aged (to distinguish from the mentally ill aged) should be studied by welfare and social agencies qualified to determine what part, if any, the State should play in their rehabilitation, housing and care.
- 5. The most crying need evident for the adequate treatment of the mentally ill is the recruitment of more adequately trained personnel in all catagories including psychologists, psychiatric social workers, psychiatric nurses, occupational and physical therapists, attendants and maintainance personnel, to fit into the program under the direction of the psychiatrists. It appears that to obtain these people it is necessary that adequate housing be available to them. It is therefore recommended that legislatve action be instituted to pro-

(Continued on Page 75)

USD MEDICAL SCHOOL DEDICATION MARCH 27-28



John M. Russell

John McFarlane Russell is the Vice President and Executive Director of the John and

Mary R. Markle Foundation of New York City.

of South Dakota, is the recipient of a Markle Scholarship.

His entry into the financial, or philanthropic sphere of medical education in 1946, was accompanied by a wealth of educational, diplomatic, and organizational experience, accumulated since his graduation from the University of Michigan in 1924. During the last Great War he served with the United States Army in the Southwest Pacific area as research officer of the Allied Geographical Sector, G.H.Q. His work in the peaceful world had been mainly with the Carnegie Corporation as assistant survey administrator and presidential assistant. His own travels in the survey of world educational needs had included the British Commonwealth countries of Australia, New Zealand, and South Africa. He took his present office with this "younger" philanthropic foundation at a time when, since its start, its program and policies were approaching their second major crossroads of decision.

Briefly, the Foundation was chartered in 1927, and administered by John Markle with his advisers so that the initial endownment of \$3,000,000 should "promote the advancement and diffusion of knowledge — and the general good of mankind." The first great change of policy followed upon Mr. Markle's death in 1933. For 12 years from 1935 onwards, the accrued fortunes of this philanthropist and his wife, were channeled into the familiar scheme of grants-in-aid of medical research. It was in this particular era that men of the stature of Doctors John H. Lawrence, J. H. Means, E. B. Astwood, George W. Thorn, Fuller Albright, and many others received substantial financial assistance with their researches. Then, in 1947, the "Scholar Plan," or the "Teacher-investigator" scholarship program was devised. This was to give support to those men whose desires and ambitions lay within this continent's medical schools; those who had chosen and hoped that the future may be in the delivery as well as the aquisition of knowledge as a medical teacher. They were to be the third, if perhaps the longest-term, facet in John Markle's wish to promote the advancement of knowledge and the good of mankind. This program was put into effect in 1948, and now helps to support 111 full-time teachers of medical science, and up to the time of accounting in March of 1953, had done so at a cost of \$3,229,000. Dr. John H. Fodden, Associate Professor of Pathology, at the School of Medicine, University



EDWARD J. McCORMICK, M.D.

107th PRESIDENT, AMERICAN MEDICAL ASSOCIATION

Dr. Edward J. McCormick of Toledo, president of the American Medical Association for the year ending in June, 1954, has more interests and is engaged in more activities than many men half his age.

He was born in September 25, 1891, in Alger, Michigan. His family later settled in Toledo, where he received his B.A. and M.A. degrees from St. John's University in 1911 and 1913, respectively. He obtained his medical degree at St. Louis University in 1915, and served his internship at St. Vincent's Hospital, Toledo.

Early in 1917 he enlisted in the Army's Medical Corps Reserve. In August of that year, just a few months after he had gone into private practice, he was called up and assigned to over-seas duty with the British Expeditionary Forces. He served throughout the war with the 47th North Midland British Division, which broke the Hindenburg Line; was promoted from lieutentant to major, and awarded the British Military Cross. Upon returning to this country, he served for a few months at Walter Reed Hospital before his discharge in 1919.

A past president and trustee of the Academy of Medicine of Toledo and Lucas County and a former president of the Ohio State Medical Association, in the last decade he has concentrated most of his organizational activities in the American Medical Association. For two years — 1943 and 1944 — he was a member of the A.M.A.'s House of Delegates. When the Council on Medical Service was formed in 1943, he was appointed a member and served on that body until 1947, the last two years as chairman.

In 1947 he was elected to the Board of Trustees, named a member of the Committee on

Scientific Exhibit (chairman in 1950) and appointed to the Council on Industrial Health. At the annual convention in Chicago last June, he was chosen president-elect.

Dr. McCormick is chairman of the advisory board for Toledo's St. Vincent's Hospital, where he has been a staff member since 1922 and served as chief of staff from 1939 to 1949. He is also a past director of surgery and a trustee of the Maumee Valley Hospital, surgeon to St. Anthony's Orphanage and, since 1949, surgeon for the Nickel Plate Railway Company.

In 1949 he was a member of the medical mission invited by Gen. Douglas MacArthur to make a survey of Japan's health needs, and the following year he went to Geneva, Switzerland, as a Unted States delegate to the U.N.'s third World Health Organization assembly.

He served as the first president of Toledo's Board of Health from 1940 to 1943, and was president of the Toledo City Manager League in 1935.

Aside from maintaining membership in a long list of professional societies, Dr. McCormick also has been active in a number of veteran, fraternal and civic organizations.

In 1938 he was Grand Exalted Ruler of the Benevolent and Protective Order of Elks, and later was named honorary president of the Elk's cerebral palsy treatment center at Canton, O. He is a past commander of a Toledo American Legion Post, member of the Forty and Eight, past president of the Toledo Lions Club, a fourth degree Knight of Columbus, executive committee member of the Toledo area Boy Scouts, a former trustee and director of the local American Red Cross chapter, an ex-director of the University of Toledo, and a member of the Toledo Club and the Inverness Country Club.

Dr. McCormick's home is in Ottawa Hills, a suburb of Toledo. He and his wife, the former Josephine Beck, have six grown children — three sons and three daughters — and two grand-children.



A Medical Art exhibit will be shown at USD Medical School Building dedication.

OTHER DEDICATION SPEAKERS



Alton Ochsner, M.D.

John H. Lawrence, M.D.

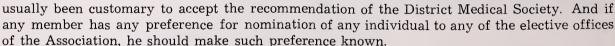


PRESIDENT'S PAGE

When you read this page less than two months will remain before the Annual Meeting of the South Dakota State Medical Association. It is high time, therefore, that each and every member of the Association give some thought to his duties and obligations to his medical organization.

Officers and Committeemen should get the reports of their activities during the past year in order, and outline their recommendations for future action. Officers of the component District Medical Societies should allot some time at their District Meetings for discussion of State Medical Association affairs, and individual members should present their views on various problems to their Delegates, so that the Delegates can represent their district with informed intelligence and maximum effectiveness.

The terms of the Councillors of the Third, Fifth, Sixth and Seventh Districts expire this year. While it is true that the Councillors are elected by the House of Delegates, it has



There are many problems and controversial subjects which will be brought up at the Annual Meeting of the House of Delegates, such as Workmen's Compensation, Care of the Indigent, Inter-professional Relations, Public Policies and Legislation, Voluntary Prepayment Insurance Plans, and so on. If you have any definite views on any of these or other subjects, don't hesitate to express them to your Officers, Committee men or Delegates. If you fail to present your ideas through the proper channels, don't howl when action is taken which is contrary to your desires. Our organization is a democratic one, but it cannot function properly unless individual members take an active interest in its problems and activities.

In regard to Inter-professional Relations, I ran across a definition by Samuel W. Hartwell, M.D., of Muskegon, Michigan, which I would like to pass on to you for your thoughtful consideration. "The Doctor of Medicine is one whose training and outlook are predicated upon the acquisition and use of all available knowledge for the benefit of each individual patient. He makes no effort to lure people to his office. He and his PROFESSION are completely responsible for what we know and do regarding sanitation, prevention of disease and public health. The cultist is one whose training and outlook are predicated upon some single, narrow, philosophical thesis or assumption. He fits each patient into his narrow band of knowledge and reasoning. He does his best to lure people into his office to increase his BUSINESS. He contributes nothing to sanitation, preventive medicine, or public health."

Scientific medical research has resulted in phenomenal advances in the practice of medicine during the past quarter century. Medical research, in the opinion of some, is the best answer to chiropractic and other cultist practices that have remained sterile in new discoveries and advances in their respective fields, regardless of the sincerity with which their practices and modalities are applied.





AUTOPSY LAW

Recently a question came to the attention of the editors concerning the laws on autopsies and because very few physicians seemed to be acquainted with the 1951 legislation on the subject we have decided to reproduce it here:

Chapter 188 Session Laws of 1951

Section 1. A coroner whenever he shall determine that a deceased person may have died by unlawful means may order and direct a physician or surgeon to perform an autopsy. If said coroner be a physician or surgeon he may personally perform such autopsy. Said coroner, physician or surgeon, shall receive a reasonable fee for his services to be ascertained and approved by the Board of County Commissioners and payable out of the general fund of the County.

Section 2. An autopsy may be performed upon the body of a deceased person by a physician or surgeon when so authorized in writing, (a) by the decedent during his lifetime, or (b) by the decedent's surviving spouse, or (c) if the surviving spouse is incompetent or not available or if there be no surviving spouse, by an adult child, parent, brother, or sister of the decedent: Provided, that such autopsy shall not be performed under a consent given as required by clause (c) of this section if, before such autopsy is performed, any adult child or parent of the decedent shall object in writing to the physician or surgeon by whom the autopsy is performed.

Section 3. All acts or parts of acts in conflict herewith are hereby repealed.

APPROVED FEBRUARY 27, 1951.

THE MEDICAL BOOKSHELF

The Medical Library of the University of South Dakota offers, as one of its functions, services to the medical profession and others throughout the state interested in the field of medicine. This includes loans of materials, answers to reference questions and the compiling of bibliographies.

This column proposes to give brief reviews of some of the significant books received in the library and, also of important articles in current journals, which would be of interest to the practicing physician and others in the medical field. The books and journals reviewed, as well as other materials in the medical library may be borrowed for one week.

Clinical Orthopaedics by A. F. DePalma. Number two. Lippincott, 1953. These original articles on orthopedics, the publication of which is sponsored by the Association of Bone and Joint Surgeons, are of a practical nature. Section 1 is devoted to intramedullary nailing, and includes a chapter on the development of fracture surgery during the past one hundred years and opinions regarding the present status of fracture treatment. Section 2. General orthopedics including gross osteopathy of arthritis; ischial apophysioltsis; Phemister bone graft; Durham flat-foot plasty.

Note: Of especial interest to South Da-

Note: Of especial interest to South Dakotans is the chapter by Dr. Robert E. Van Demark of Sioux Falls on "Treatment of Certain Comminuted Femoral-Shaft Fractures.

tures.

Current Therapy edited by H. F. Conn. Saunders, 1954. For the practitioner who seeks authoritative information in condensed form on methods of treating specific diseases, or what changes have taken place in certain therapies. Authoritative methods are included for treating each disease, either by long recognized procedures or by the latest standard therapy.

the latest standard therapy.

Office Management of Oculaer Diseases.
Yearbook, 1953. Valuable current opthalmologic information; practical details of diagnosis and treatment of a specific patient. Final chapter is on opthalmic formulary and preparation of opthalmic drugs.

Practical hints are given on technics of

examination and interpretation of results.

Pathology by W. A. D. Anderson. Mosby,
1933. This second edition is a comprehensive text, useful as a reference tool for both students and practicing physicians. Prominence is given to the effects of radiation; increased attention to certain viral, protozoal and parasitic conditions, diseases of the skin, organs of the special senses, the nervous system and the skeletal system.

Surgery of the Ambulatory Patient by L. K. Ferguson. Lippincott, 1947 Practical book discussing lesions which are met regularly in an office or out patient clinic. General discussion of typical lesions with descriptions of their cause, course and care; regional surey and methods of treatment

of fractures and dislocations.

Surgical Clinics of North America. V. 33, no. 5, Oct. 1953. The entire issue of this journal is a symposium on ambulant surgery important in the office treatment of surgical lesions; infections in minor surgery, treatment of wounds of hand; shoulder lesions; orthopedic management of foot disorders; great toe surgery, and other lesions. Presented by experienced surgeons.

Mrs. Esther Howard, Medical Librarian

University of South Dakota Medical

Library

MEDICAL SCHOOL AFFAIRS COMMITTEE Marvin Hughitt Hotel-Huron, January 30, 1954

The Committee on Medical School Affairs convened at the Marvin Hughitt Hotel on January 30, 1954. Dr. McVay, chairman of the committee, called the meeting to order at 9:45 p. m.

Those present were: Drs. McVay, Van Demark, Lampert, Price, Williams, Brown, Pankow, Hard and executive secretary, Foster.

Dr. Hard discussed several topics dealing with the medical school. A discussion was first held on the Dedication program for the new medical school building to be held on March 27th, 1954.

Dr. Hard then discussed the teaching schedule at the school; gave a report on the National Fund for Medical Education and American Medical Education Foundation. mentioned that the medical school had received \$13,803.11 from the AMEF during the past calender year. A report was also given on research grants and teaching grants to the University Medical School.

After a discussion was held on post graduate education for the State, Dr. Pankow moved that the Committee go on record as favoring some form of post-graduate education for South Dakota. The motion was seconded by Dr. Price and carried. Dr. Pankow then moved that the committee request the chairman of the Committee to ask the President of the State Medical Association, the Chairman of the Council and the Dean of the Medical School to meet with him to work out a program that would be workable for an extension agency. Motion seconded by Dr. Brown and carried.

A discussion was also held on the scholarships and loans to the School.

Dr. Price was appointed by the committee to attend the Conference on Medical Education to be held in Chicago in early February.

On motion the meeting adjourned at 10:10 p.m.

COMMITTEE ON PREPAYMENT INSURANCE PLANS Marvin Hughitt Hotel, Huron January 31, 1954

The Committee on Prepayment and Insurance Plans met at the Marvin Hughitt Hotel at 10:30 a.m., Sunday, January 31st. Those present were: Drs. McDonald, Johnson, Breit, Lampert, Dean and executive secretary, Fos-

Mr. Ed Calaghan presented the policy of the North American Life and Casualty Company. After a discussion Dr. Dean moved the adoption of the policy. Motion seconded by Dr. Breit and carried.

After a discussion on the policy of Central States Accident and Health Association, Dr. Dean moved that the committee adopt the policy. Motion seconded by Dr. Johnson and carried.

Meeting adjourned at 11:55 a.m.

LIASON COMMITTEE WITH STATE BOARD OF HEALTH Marvin Hughitt Hotel, Huron January 30, 1954

The Liason Committee with the State Department of Health met at the Marvin Hughitt Hotel in Huron at 5:15 p.m., Saturday, January 30th. Those present were: Drs. Geib, Wessman, Vogele, Van Heuvelan, Mayer and executive secretary, Foster.

A discussion was held on the duties of public health nurses. It was recommended that the activities of the public health nurses should be up to the local medical societies. It was noted that there were no difficulties between Public Health nurses and the medical profession in South Dakota.

Instruction in pre and post natal care presented no problem in South Dakota because of nurses currently in Public Health work having so many other duties they are unable to take up this instruction.

Meeting adjourned at 6:00 p.m.

DR. FINN KOREN SUCCUMBS

Dr. Finn Koen, for more than 25 years a phsician in Watertown, died January 31st, at his home in Chilliwack, B. C., Canada, where he had lived since retiring. He was 80 years old.

He was affiliated with the Watertown

He was affiliated with the Watertown Clinic from 1915 to 1941 and was a member of the Watertown District Medical

Society.

Dr. Koren received his medical degree from the University of Minnesota in 1901. He was a member of the S. D. Medical Society. The American Medical Ass'n., The American Congress of Medicine, and the Radiological Society of North America. In 1915 he was counselor for The South Dakota Radiological Society.

(Continued from Page 67) vide necessary housing.

It is also felt that the student nurse training program should be expanded. Present housing facilities for nurses are inadequate. This situation would be corrected by the rebuilding of the antiquated central section of the administrative building and incorporation therein of nurses quarters.

The committee recommends that no plans be entered into that would consolidate the mental institution into a department of health and welfare which would reverse a trend towards a mental health authority which is considered more desirable. Recent recommendations by an out-ofstate firm which would consolidate Yankton State Hospital with such governmental sections as the Committee on Water Pollution and portions of the Agricultural Department could easily lead to a lowering of the caliber of care now being given patients at Yankton State Hospital. This recommendation is in keeping with recommendations of the American Psychiatric Association.

Whenever You Are In Sioux Falls

Be Sure and Visit Our New Store . .



Complete Line of Equipment, Supplies and Drugs

KREISER'S Inc.

21st & Minn.

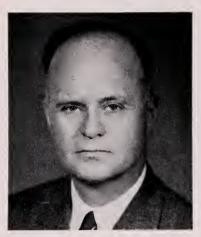
Sioux Falls, S. D.



This is your

MEDICAL ASSOCIATION

Guest Speakers to Be Heard at Annual Meeting in May



E. H. FELL, M.D. ON PROGRAM

Egebert H. Fell, M.D., Chicago, will be one of the surgical speakers on the Annual Meeting program of the South Dakota State Medcal Association.

Dr. Fell is Clinical Professor of Surgery at the University of Illinois and Attending Surgeon at Presbyterian and Cook County Hospital in Chicago.

He will speak on "Cardiovascular Surgery" and "Cardiac Arrest."

ARTHUR GROLLMAN, M.D. IS S. D. SPEAKER

Dr. Arthur Grollman, Professor and Chairman of the Department of Experimental Medicine at the Southwestern Medical School of the University of Texas, will be one of the featured speakers of the annual meeting of the South Dakota State Medical Association in Huron, May 16-17th.



Educated at Johns Hopkins and holding both a Ph.D and M.D., Dr. Grollman is the author of eight medical books and over one-hundred sixty published scientific papers. He has taught midcine at John Hopkins, U. of London, U. of Heidelberg, U. of Berlin, Bowman-Gray, and Southwestern.

Dr. Grollman will appear twice on the program using the subjects "Hypertension" and "Use and Abuse of Drug Therapy."

YANKTON DISTRICT HEARS DR. BROWN

Dr. Carroll Brown, Sioux City neurosurgeon, spoke on head injuries at the Yankton District Medical Society Meeting held at Sacred Heart Hospital February 3rd.

In addition to the scientific program, **Dr. A. P. Reding**, district councillor, reported on the council meeting held January 31, in Huron. Next district meeting is scheduled for Sacred Heart Hospital on March 24th.

NERVOUSNESS IS 7th DISTRICT TALK SUBJECT

"Some Basic Factors in the Production of Nervousness" was the subject of a paper by Dr. H. B. Hannah at the regular February meeting of the Seventh District Medical Society in Sioux Falls.

The paper was followed by a discussion by **Dr. Roy C. Knowles** of the Minnehaha County Mental Health Center.

G. P. ACADEMY TO HEAR THOREK

Dr. Phil Thorek, Chicago, and several other doctors of his choosing will form a symposium on automobile accidents at the South Dakota Academy of General Practice meeting in Huron, April 3 and 4.

This subject will be discussed by an Internist, an orthopedic surgeon, a general surgeon, a brain surgeon and specialist of thoracic surgery. The minimal requirements of apparatus and appliances will be discussed and types of treatment for various types of automobile accidents.

The meeeting will start at 1:00 Saturday afternoon and continue into the evening. There will be a dinner at 6:00. The program then will finish Sunday morning from 9:00 to 12:00.

ARTICLE IN DAKOTA FARMER STIRS NOTICE

An article entitled "Home-Aid Hospital" written by John C. Foster, executive secretary of the South Dakota State Medical Association and published in the October 1953 "Dakota Farmer" was the basis of a news feature release by United Press to its 1300 affiliated radio stations.

The broadcast told, as reported in Foster's paper, how a small community (Lake Preston) got together to build a modern small hospital at less than 1/3rd the normal cost.

The news feature was designed to kick-off publicity for the National Rural Health Conference which was held in Dallas, March 4, 5 and 6.

NEWS NOTES

The American Goiter Association will meet at the Somerset Hotel, Boston, Massachusetts, April 29th through May 1st. Discussions will cover physiology and di-

seases of the thyroid gland.

Dr. Jose Villa plans to establish practice at Iroquois, South Dakota.

The regional meeting of the AMA's Council on legislation at Denver, January 23rd was attended by three from South Dakota; Roy E. Jernstrom. M.D., Rapid City; G. S. Owen, M.D., Rapid City; and John C. Foster.

The Pan-Pacific surgical congress will be held in Honolulu, Hawaii, October 7th through the 18th. Information is available from F. J. Pinkerton. M.D., Director General, Pan-Pacific Surgical Association, Suite Seven, Young Building, Honolulu, Hawaii.

The Medical Association placement service has located an ophthalmologist looking for a spot in South Dakota. If you need such a man, let the executive secretary know about it.

Mrs. Harvey Jewett. Jr. and Dr. J. D. Alway. Aberdeen, were married in February in New Orleans and visited Jamaica on their wedding trip.

The State Hospital at Yankton has a new advisory committee made up of Dr. C. B. McVay, Roy Knowles, George Smith, Walter Hard and medical association executive secretary J. C. Foster. Recommendations for bettering care of the mentally ill are published elsewhere in the Journal.

Drs. R. J. Delaney, Mitchell, and Y. H. Charbonneau, Huron, left last month for Africa where they planned to obtain big game animals, African handicrafts, etc. for the W. H. Over Museum of the University of South Dakota.

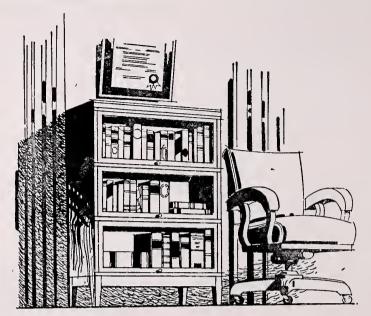
Jerome Sayler, M.D., Howard, has been appointed medical adviser to selective service in the Minor County area.

MEDICAL DIPLOMA COSTS STUDIED

Medical college training in America costs approximately \$9,200 today. That's what the average student spends for four years in medical school, according to a report published in the February issue of the Journal of MEDICAL EDUCATION.

The study, by John M. Stalnaker and Sarah Counts of the Association of American Medical Colleges, was based on questionnaires sent to students at 26 medical schools throughout the country. The \$9,200 does not cover the cost of premedical training, internship and residency training, or the cost to the young physician of setting himself up in practice.

One-third of the 6,251 students who answered expect to be in debt when they graduate from medical school, to the tune of approximately \$3,500. Most of the students showed reluctance to borrow money from their parents, but 95 per cent reported that they could obtain money for emergency expense from various sources.



PROFESSIONAL MEN! Add dignity and distinction to your office

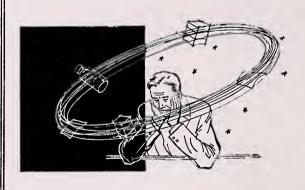
There's nothing like a Globe-Wernicke wood sectional bookcase to give that professional atmosphere to your office or reception room. It not only adds dignity but also protects those valuable reference and professional books you prize so highly. The bookcase illustrated is the three-section Universal style with receding glass doors. Other models and styles on display in our show room. Visit us or phone today for a folder illustrating the complete line.

MIDWEST-BEACH COMPANY

222 S. Phillips Avenue

Sioux Falls, S. Dak.

Phone 4-5853



Having profit problems?

Countless druggists are finding the answer to the profit problem in the time-tested method of featuring professional service. They assure prompt movement of prescription commodity stocks by purchasing medicinal agents which are in ready prescription demand and which dispense at a fair and reasonable cost to the patient. Moreover, they feature the Lilly label and buy as needed from our complete and comprehensive stock of Lilly pharmaceutical and biological products.

You are invited to take advantage of our quick, competent service.

BROWN DRUG COMPANY

Sioux Falls, South Dakota



THE MODERN PHARMACEUTICAL INDUSTRY*

John F. Bohmfalk, Jr.**
Clark, Dodge and Co., New York, N. Y.

The present state of affairs in the pharmaceutical business has been described as "fluid," or "going through a readjustment period," or "just plain stinks." Regardless of which description applies, the drug business has passed through the greatest feast and famine period in its history. Now, great chunks of the industry have become chemicalized, by merger with large chemical concerns and also by internal development of chemical engineering knowhow.

To be sure, the pharmaceutical industry had ties with chemical industry before 1900 when product lists included botanicals, chemicals (mostly salts of calcium, iron, mercury, and sodium), and alkaloids. Quinine was an important item, and phenolphthalein as a laxative made a big splash in 1908. The materia medica took on a new look with the appearance of vitamins in the twenties and hormones in the thirties, while botanical drugs and simple chemicals almost disappeared, except for a few old standbys as digitalis, ergot, and iron compounds.

The modern drug era began with the sulfonamides which had their origin in the German dyestuff research. But rather than attribute the development of wonder drugs to any one branch of chemical industry, a more realistic approach would point to the organic

*Reprinted from CHEMICAL AND ENGINEER-ING NEWS, American Chemical Society, Vol.

31, Page 5356, December 28, 1953. Copyright 1953 by the American Chemical Society and reprinted by permission of the copyright owner.

**Chemical Specialist in the research department of the brokerage firm of Clark, Dodge and Co. Author of several articles on chemical economics. chemist and biochemist as progenitors of the new synthetic medicinals industry. Thus, catalysed by the common denominator of organic and biochemistry, the rapprochement of the chemical and drug industries is in full swing.

Today the difficulties confronting the pharmaceutical industry have reached serious proportions, as the antibiotic scramble shows few signs of abating. But if history repeats, the industry will elevate its sights and aim at the targets ahead: the conquering of polio, heart disease, cancer, virus and degenerative diseases, and many others still to be solved. Indeed the history of modern drug development since the sulfonamides suggests that there has been a research breakthrough of great proportion. The greater knowledge today of physiological and metabolic functions, coupled with the development of chemotherapeutic agents which either block or catalyze vital functions, indicates that startling new discoveries are in the offing. Horizons have been extended under the pressure of research advance to the point that the time cycle of important discoveries has been compressed drastically.

In our time, we have seen a vitamin boom, an antibiotic boom, and a succession of lesser booms in sulfonamides, barbiturates, and others. Profits derived from each new commercial development have been plowed back into research and development. The results, measured in economic terms, attest to the wisdom of this policy. Drug industry growth approximates 19% annually in terms of pro-

duction units, calculates Stanford Research Institute. Drugstore prescription sales rose from \$166 million in 1939 to \$815 million in 1952 — a gain of 391% — according to estimates by DRUG TOPICS. In this same period, however, such companies as Pfizer and Hoffmann-La Roche have multiplied sales by a factor of 10. Vitamin sales increased by a factor of 7, and antibiotic sales came from nowhere to an annual volume of \$267 million in 1952 after a total capital expenditure of about \$200 million.

From the standpoint of statistics alone, the pharmaceutical industry stands out as the most progressive and most research-minded of the chemical process industries. In addition, the drug industry fulfills a public service function of bettering health standards and alleviating mankind's ills, a function which it carrys out with full regard for its obligations. Modern drugs have contributed materially to an increase in life expectancy, now 68 years from birth, but with the resultant threat of over-population and food shortages. Yet these very threats may well be alleviated by the recent development of vitamin and antibiotic supplements to animal feed, which offer the promise of more food at lower cost. The wondrous workings of the drug industry may be told in an analysis of the character of the industry, in its research and new developments, and in the distribution practices of the industry.

Rugged Enterprise Formed the Character of the Industry

The United States pharmaceutical industry is today preeminent in the world. This exalted position has been attained by a system of rugged enterprise, certain aspects of which are unique to the industry. While European research was the cradle of the modern drug industry in this country, the U. S. enterprise system has avoided to a large degree tendencies toward splitting up research activities and apportioning markets among different firms. In the Old World system, artificially high prices impede market development and slow the rate of research progress. Certainly, the history of sex hormones has certain cartellike elements.

The strength of the U. S. system lies in the competitive challenge offered by the profit reward held out to the successful development of new products, preferably, for new

markets. But it is still more complicated than this simple exposition would indicate. The stimulation of the profit reward sets in motion a chain of events which precipitates progress at what seems to be an accelerating pace. In the usual course of events, the successful research of a new product by one company is generally followed in short order by successful research by another company of a better means of producing the same product or of another product which, in part, makes the original discovery obsolete. Because of this competitive factor in research, profit margins are usually maintained at reasonable levels, and the benefits of cost reductions are passed along promptly, partly in the consumers' interests, but mainly to make it as unattractive as possible for potential competitors desiring to carve out a slice of the lush market. Plainly this is good business, for it helps the original producer maintain a firm grip on the market.

Even nature conspires to keep the industry in a state of ferment. "Bacteria are versatile organisms," as Ernest H. Volwiler, president of Abbott Laboratories expresses it; "by changes or mutations, some of them can adapt themselves to the drugs to which their ancestors easily fall prey. Sometimes, one predominant strain of bacteria may be eradicated, leaving the field open to an obscure, resistant strain which had not been important. The battle against pathogenic bacteria is thus an eternal one."

Still other aspects of the industry which contribute to its vigorous, competitive character are

- 1. There are no predominant companies in the industry, and few companies have annual sales of more than \$100 million. Strictly speaking, only American Home Products, Parke-Davis, and Eli Lilly have surpassed the \$100 million mark.
- 2. Most drug companies of any size have national distribution of their products. Plant location and freight rates are not factors in determining marketing areas, as they are in chemical industry. On the other hand, certain small firms as McNeil Laboratories, Philadelphia, Pa., Stuart Co. in Pasadena, Calif., and A. H. Robins Co. in Richmond, Va., for example, do an excellent job of merchandising in local areas with limited product lines, and have built respectable sales

volumes in this manner.

- 3. Research expenditures are high in relation to sales ranging from 3 to 8%. There is a small spread in the dollar amount of research expenditures from small to large companies, with some of the latter spending no more than \$5 million annually, as contrasted with a relatively large spread found in the chemical industry proper.
- 4. Drug prices have a high degree of mobility. This characteristic may be attributed to a high sales to plant investment ratio and to relatively minor costs of production in terms of sales value. In addition to these, the high cost of the selling effort put behind the distribution of drug products absorbs fully half of the sales value, on the average, at the retail level.
- 5. Domestic and export markets for pharmaceuticals totaled \$1.1 billion in 1952, calculated at the manufacturers' sales level. Further expansion of markets on a large scale may easily be visualized. An improvement in the nation's health consciousness and the community interest shown in diagnostic clinics and in preventative medicine are encouraging signs.
- 6. Although most drugs are sold in gram quantities, large amounts of solvents and other processing chemicals are consumed in the more complex processes of the modern drug industry (e.g. antibiotics, vitamin A, and cortisone). This fact together with the critical importance of yield have required an elevation in the standard of engineering efficiency, which is gradually being accomplished. Labor costs are quite low, and in fact half of the industry is nonunionized.

SALES TREND IN THOUSANDS OF DOLLARS

Of BOLLAND						
	1939	1944	1949	1952		
Full Line Comp	anies					
Abbott						
Laboratories	\$11,485	\$36,428	\$67,552	\$85,528		
Eli Lilly	23,750	61,110	115,600	120,089		
Parke-Davis	32,809	49,811	86,786	126,313		
Sharp & Dohm	e 10,151	27,220	38,990	50,400		
E. R. Squibb	•	,	•	,		
& Sons	19,700E	53,553	87,535	100,000E		
Specialty Drug	Companie	es				
Cutter						
Laboratories	1,312	4,996	7,837	11,191		
Schering	1,967	6,255	14,847	18,907		
G. D. Searle	1,708	4,939	11,763	22,384		
Smith, Kline			ĺ	ĺ		
& French	9,611	19,192	39,705	47,018		
Fine Chemicals Companies						
Merck & Co.,						
Inc.	20,061	52,763	73,578	113,458		
Chas. Pfizer	6,190	24,436	47,553	107,089		

Competitive Struggle for the Ethical Market Increases

About 250 drug companies sell ethical drug products in the United States. Of these, only four are strictly full line companies, and they include (Group I) Parke-Davis, Eli Lilly, Abbott Laboratories, and Upjohn. Ethical drug sales of American Home Products divisions rank with Parke-Davis' and Lilly's sales volume. Squibb and Sharp & Dohme approach the category of full line companies. To this group must be added a substantial number of specialty drug producers (Group II, ranged in decreasing order of sales) including Lederle Laboratories; Hoffmann-La Roche, Winthrop-Stearns; Smith, Kline & French; G. D. Searle; Ciba; Schering; Ayerst; and Burroughs Wellcome. Still another group consists of fine chemical manufacturers, which sell both in bulk to ethical drug companies and directly to wholesale or retail channels. Merck and Pfizer are leading examples of companies in this classification (Group III). Other include Mallinckrodt, Heyden, and Commercial Solvents. While there are many other smaller drug companies, some with interesting futures, the three groups listed above comprise the three major segments of the pharmaceutical industry.

In the past decade, Searle, Hoffmann-La Roche, Merck, and Pfizer have had the greatest success within the industry, from the standpoint of sales growth. This success is a tribute to the value of emphasis on research, together with the fact that these companies were well situated to take advantage of progress in vitamin, antibiotic, hormone, and other developments. Because of the increasing tempo of chemotherapeutic advance, the ethical drug companies proper, those in Groups I and II, found it necessary to place new emphasis on research in the hope of keeping abreast of competitors. During and following World War II, these companies established or reorganized research departments, a process which in certain cases is still in the course of development. Companies such as Upjohn, Lederle, Hoffmann, and Searle have already reaped the benefits of this policy, and all four rank very high today in the general excellence of their research and development.

This move toward fortification of research by the Group I companies has been countered by a change in emphasis of the fine chemical producers (Group III) from selling in bulk toward selling products carrying their own labels directly into the drug trade. As a consequence, the two groups are now in active competition with each other, both as to research and merchandising. Both groups are in the process of proving that research departments and merchandising organizations can be established on an effective basis. Thus, the competitive struggle for new products and new sales is moving forward on a broader, but more vigorous scale. Because the drug industry today is very largely the story of antibiotics, which account for almost one third of the total ethical drug sales, the modern evolution of the industry can best be told in terms of the antibiotic revolution.

PLANT EXPENDITURES IN THOUSANDS OF DOLLARS

	1946	1949	1952
Abbott Laboratories	\$2,399	\$2,641	\$ 6,131
Merck & Co., Inc.	3,917	5,692	10,285
Parke, Davis & Co.	2,266	2,167	6,419
Chas. Pfizer	3,637	4,582	9,241
Sharp & Dohme	542	1,195	691
Squibb & Sons	4,286	608	6,258
G. D. Searle & Co.	620	135	25

Antibiotic Development Characterizes The Drug Industry

Without much doubt, the advent of antibiotics has wrought profound changes in the character of the drug industry. The spectacular wartime development of penicillin found such fermentation producers as Pfizer and Commercial Solvents in the forefront of the production scramble. Both companies sold penicillin in bulk to the drug companies.

Some 13 producers in all climbed on the penicillin bandwagon, most getting a start during wartime under stimulus of Office of Scientific Research and Development prodding. But a larger number of companies, lacking broad experience in industrial fermentation techniques, did nothing more than experiment with pilot plant production. Parke-Davis, Sharp & Dohme, and Sterling Drug are not now numbered as commercial producers of penicillin, and Lederle abandoned its highcost operation when it was found that other suppliers could sell penicillin at less than Lederle's cost. Economically, the antibiotic industry stood on shaky ground from the very start. Only Pfizer and Commercial Solvents had broad industrial experience in fermentation processes.

Because of penicillin's popularity with physicians, those drug companies which could supply the antibiotic had selling leverage over their less fortunate competitors. But still there was not enough penicillin to go around, and the ethical drug companies naturally began to look to their own production organizations as a secure source of supply. In the meantime, Merck had investigated the possibility of a penicillin synthesis, a project which did not prove economically feasible, and belatedly turned to the fermentation approach. Abbott brought R. D. Coghill to North Chicago from the Northern Regional Research Laboratories where he had pioneered in deep vat fermentation processes. to help in establishing an efficient penicillin operation as well as to head up research for the company.

As the industry's production of penicillin rose with the installation of additional fermentors and with the development of new and more efficient extraction techniques, the integrated companies as Squibb, Lilly, Upjohn, and Abbott depended less and less on the bulk producers to round out their requirements.

In 1949, penicillin production reached 10 trillion units (22,000 pounds) a month, but the readjustment period had its start during the recession that year and has continued, with the exception of a temporary stabilization in the post-Korea period, up to the present time. Yet penicillin production actually climbed to a peak of 34.5 trillion units in November 1951 — during the readjustment period — and has since levelled off in the 30 trillion unit range. Also during this period, exports of penicillin rose steadily to a peak of 9.4 trillion units in May 1951, then declined steadily thereafter to a low of 4.1 trillion units in July 1952. At present, penicillin exports hover precariously at about 6 trillion units a month. (A unit is defined as a standard amount of penicillin having antibacterial activity equivalent to that contained in 0.6 microgram of chemically pure penicillin G.)

Penicillin prices have fallen precipitously to the point that by mid-summer of 1952, the antibiotic was auctioned off at prices of about 76 to 85 cents per 3 million units, and some prices even lower for short dated penicillin. Production cost is approximately 32 to 33 cents for this quantity, while the cost of the

vial together with sterlizing, capping, and packaging adds on the average about 15 cents. Of course, the competition became so keen that occasionally large transactions occurred at discounts of one third below the above prices, while the bulk penicillin was sold at production cost.

Since a shrinkage in profit margin was coupled with reduced demand and over-capacity, hardest hit producers were nonintegrated (bulk) sellers of penicillin. The integrated producers, carrying from fermentation through distribution under their own labels, were able to supply only their own requirements, with less of a decline in over-all profit margins.

In retrospect, there were a number of causes for the penicillin debacle. First and most important, there were a number of producers, getting a start during the stresses of World War II, who had no experience in the ethical drug business. Second, the drug industry has been going through a realignment tending to blur the line between fine chemical and ethical drug producers. Those producers who did not adjust to this trend were left behind. Third, lack of experience on the part of some companies in the pricing of fine chemicals and in the realities of distribution methods aggravated the situation. Fourth. Government stimulation of capacity build-up, aided by the drug industry's belief that the bull market in penicillin could go on forever, very clearly led to excessive inventories and precipitated distress selling. And fifth, foreign competition along with difficulties in convertibility of foreign currencies reversed the trend of increasing export sales.

Thus, the antibiotic boom, which had registered a production growth rate of 80% a year, came to a grinding halt. Fortunately, there are a number of stabilizing factors now apparent in the antibiotic picture. Stronger factors have a better chance of holding competitive positions and certainly of registering sales gains. But penicillin will continue to be virtually without profit. New and more effective forms of penicillin (Remanden and Bicillin) suggest that further technological improvements can be made. This path of development could lead to patented and trademarked penicillin derivatives, thus offering an improved competitive position for such products. The penicillin field has been thoroughly trampled by researchers looking for better penicillin modifications with fewer side-reactions and other desirable characteristics, however, and it should be noted that Wyeth's Bicillin was in patent interference with conflicting claims of Pfizer and Lilly.

Synergistic combinations of penicillin with streptomycin, bacitracin, and also with sulfa drugs have taken hold in the modern pharmacopoeia and offer additional hope for stabilization in penicillin markets.

Antibiotic Markets Look Good Especially for Export

The outlook for antibiotic markets remains good, particularly for export markets such as the tropic zones where disease rates are high. Most extensive foreign development has centered in the Latin American countries. Problem of currency convertibility and import restrictions pose severe difficulties to the successful exploitation of foreign markets. Competition from European countries with softer currency, more liberal credit terms, and resurgent production (Germany, England, and also Japan) will tend to check the postwar U. S. monopoly on world drug trade. Notwithstanding these adverse factors, the drug industry has pursued expanded trade by organizing export subsidiaries (particularly Western Hemisphere trade corporations which qualify for large tax benefits) and foreign companies to operate plants built abroad, sometimes with the aid of local capital. Exports of all drugs have shot from \$20 million in 1939 to \$198 million in 1949, \$212 million in 1950, \$281 million in 1951, but fell to \$221 million in 1952. A breakdown of 1952 exports, see chart on this page, shows that Latin America absorbs 50% of medicinal and pharmaceutical preparations.

Domestic markets for antibiotics have approached a point of saturation. About 35 to 40% of all patients can benefit with the use of antibiotics while 30% are so treated. Penicillin dosage amounts can be advanced tremendously, but newer forms such as Bicillin and Remanden which permit maintenance of penicillin dosage levels in the blood stream for much longer periods should curtain the need for repetitive doses.

Drug Exports, 1952

\$111,500,000
15,900,000
34,600,000

Asia	47,900,000
Oceania	1,300,000
Africa	9,400,000

\$220,600,000

Broad spectrum antibiotics also have an excellent market potential, both domestic and export. Over-built fermentation capacity for penicillin and streptomycin has been shifted to some degree over to the broad spectrum antibiotics. In addition, the entry of the formidable full line drug companies-Abbott, Lilly, and Upjohn — with the new antibiotic, erythromycin, coupled with Pfizer's new product, Magnamycin, suggest that another hassle is in the offing. On the basis of past, unhappy experience with penicilin and with the publicity attending the blood disorders associated with Chloromycetin, it would seem that past mistakes of promoting the use of the board spectrum antibiotics for minor infections and of indiscriminate price cutting would not be repeated. But it would be more realistic to view the capers of the drug industry in terms of past performance and predict that a battle is shaping up for broad spectrum antibiotic markets.

Prices vs. Markets vs. Patents

This history of sharp competitive conditions existing in the drug industry points up still another characteristic of the industry. Costs of production have been a relatively small fraction of total costs. Selling prices are sensitive not to production costs but to competitive factors such as prices for related products or to such abstruse factors as pricing custom (whereby prices are set high enough to conform to drug store standards and to customers' conception of the product value). On the other hand, costs of distribution are much more flexible, as they are set in part by percentage discounts offered to wholesalers and retailers. Consequently, there is a leverage factor of considerable proportion which operates to give a flexible pricing structure to drug products. Unfortunately, the leeway offered in the pricing mechanism is not generally translated in terms of elastic demand for drugs, i.e., markets are not expanded in exact proportion to the amount of a given price reduction, simply because the consumption of drugs has a ceiling less dependent on price barriers than on the incidence of illness and the dosage prescribed according to physicians' standards.

A definitive analysis of the above characteristic of the drug industry should show that price competition is most severe for products not protected by patents or trademarks. A disturbing element in the history of the drug industry is a tendency to cross-license or grant nonexclusive licenses to competitors to produce new products of great potential. Such a system is certainly calculated to produce sharp price competition. Three recent examples of this practice are worthy of comment.

Streptomycin Points Up Public Interest and Cross-Licenses

The discovery of streptomycin by Selman A. Waksman and coworkers was regarded as a momentous one in view of the importance of the antibiotic in the treatment of tuberculosis. Merck had financed Waksman's work and had exclusive rights to the product. However, the Merck policy of enlightened public interest precluded the exploitation of these rights. In addition, there were the questions as to whether Merck should enforce its rights with Rutgers which is a state university, or whether one company could supply the market for the product, and whether one company should risk so much money on one product. As a consequence, the agreement was modified to give Merck nonexclusive rights, and the patent on streptomycin is administered by the Rutgers Research and Endowment Foundation which licensed seven producers. Similarly, Merck obtained a product patent on dihydrostreptomycin (Parke-Davis and Squibb were in interference but are cross-licensed with Merck) and licensed all comers.

Vitamin A Processes Both Cross-Licensed

A basic vitamin A process was developed in Switzerland by Otto Isler of F. Hoffmann-La Roche & Co. and adapted commercially by the Nutley, N. J., subsidiary company. Since many investigators had pursued paths to vitamin A, the Isler synthesis had certain aspects which might have interfered with independent results of others. Then again, there was the same question as to the feasibility of Hoffmann pursuing an independent course in vitamin A and attempting to finance a plant large enough to supply the potential demand. Possibly, a public relations factor may have

been another consideration. In any event, Research Corp., licensed Roche, Merck, and Pfizer under the Nicholas A. Milas patents. Licenses were issued by Roche to Merck and Pfizer to produce vitamin A by the Isler process. The cortisone patent pool, also administered by Research Corp., has certain aspects of similarity with the vitamin A development, and one notable aspect of dissimilarity — Merck did not license its know-how to any potential competitor.

Vitamin B₁₂ Wide Open for Feed But Not to Drug Trade

The vitamin B_{12} development has an entirely different ending than those of streptomycin and vitamin A. Merck has three basic patents on vitamin B_{12} , as follows:

- (1) Cyanide addition to convert B₁₂ concentrates to cyanocobalamin.
- (2) Cobalt salt addition to increase B_{12} yields 9 to 15 fold.
- (3) Crystalline vitamin B_{12} product patent. While use of the first two patents is very desirable to make feed grade concentrates of B₁₂, other means are available. Of course, the existence of the product patent on crystalline vitamin B₁₂, which sells for \$295 a gram, precludes any other manufacturer from offering this product to the drug trade. Merck decided on a non-licensing policy because the situation in the case of B₁₂ was different than are streptomycin case. The research work was done in Merck laboratories; the market for the product had not developed in such a way as to indicate the need for more than one manufacturer of the crystalline vitamin. This development of vitamin B₁₂, originally as a by-product of streptomycin manufacture but now as the main product, secured and stabilized Merck's position as the leading, low-cost producer of streptomycin. As a natural consequence, those companies which were shut out, particularly Pfizer and Abbott, have looked to other bacteriological syntheses of vitamin B_{12} , and with some success.

If there is a lesson to be derived from these examples, it is that every new product development has special characteristics which preclude a standardized solution. Generally speaking, there are two ways to proceed: (1) new products may be protected if possible by refusing to license the use of patents cover-

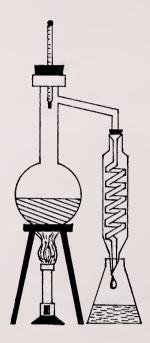
ing the invention; or (2) if circumstances dictate, licenses may be granted to a number of manufacturers, preferably a restricted number, whereby the competition engendered should broaden markets as well as sharpen production techniques and technological proficiency.

Researchers Bear Force Of Competitive Cycle

These are critical considerations in the analysis of the modern drug industry, for adequate protection of an invention is generally regarded as a prime requisite of a company's corporate health. Competition is a wonderful thing, but the drug industry seems to have been caught up in a cycle whereby competition forces accelerated progress in new chemotherapeutic advance, which in turn creates accelerated competition. As a result, new developments are made obsolete in short order. It is rare indeed, nowadays, that a drug producer will have a lead time for a new product in excess of 2 or 3 years before a similar drug or entirely new drug is placed on the market by a competitor.

The pressure created by the accelerated tempo of modern drug advance is brought to bear heavily on management and research organizations. The answer to this analysis of the drug industry must then be found in the heart of the industry — its people. The backbone of the industry is its research teams, engineering efficiency, and management boldness. These human factors add up to precision organization, even in the face of the apparently leisurely pace, academic freedom, and informal methods of communication existing in the chemical laboratories. Yet for all the organizaton efficiency, pharmaceutical firms are uniformly conscious of their responsibilities: to stockholders, employees, and especially to the public, whose health and happiness it guards, Whenever the industry feels the need of venting its spleen, competitors are the unlucky recipients. And with all the struggle, there are industry leaders who, instead of pursuing the immediate almighty dollar, have their sights clearly set on the goals ahead: the extension of the benefits of medicine to all people and to new disease areas as rapidly as possible.

RECENT PHARMACEUTICAL SPECIALTIES



Pronemia Capsules

A new antianemia vitamin capsule containing purified intrinsic factor concentrate to increase absorption of its B_{12} has been placed on the market by Lederle Laboratories.

The new product — Pronemia Antianemia Capsules — contains all known essential hematinic factors in sufficient dosage so that one capsule daily meets the needs of the average anemia patient. The capsule is indicated for the treatment of all treatable anemias, including pernicious anemia.

Absorption of vitamin B_{12} depends upon the presence of intrinsic factor. Both of these substances, according to Lederle researchers, are supplied in therapeutic quantities in a single Pronemia Capsule. Therefore, Pronemia may be given as an effective oral replacement for injectable vitamin B_{12} in many cases. The 10 milligrams of purified intrinsic factor concentrate in each capsule is equivalent in potency to at least 500 milligrams of stomach powder in intrinsic factor content.

Each Pronemia capsule contains:

Vitamin B ₁₂ 30	mcg.
Ferrous Sulfate Exsiccated400	mg.
Ascorbic Acid (C)150	mg.
Powdered Stomach200	mg.

Folic Acid	4	mg.
Furified Intrinsic		
Factor Concentrate	10	mg.
Pronemia will be packaged in bottle	es	of 30
and 100.		

Skin Test for Mumps

A new skin test antigen for mumps has been placed on the market by Lederle Laboratories Division, American Cyanamid Company.

The antigen is injected into the skin of the toic fluid of chick embryos infected with mumps virus, may serve to indicate whether a patient is or is not immune to the disease.

The antigen isinjected into the skin of the forearm and a positive reaction will form a red weal with a diameter of 15 mm. or more, within 48 hours.

A positive reaction, like the tuberculin skin test, indicates a past infection with the virus. Unlike the tuberculin test, however, it indicates that the patient is now resistant to the virus.

The test will not react positively until about two months after an attack of mumps. This means that if a person is tested shortly after exposure to mumps and reacts negatively, he has not had the disease in the past and is still susceptible. If he reacts positively, however, he has had the disease and is now resistant.

The antigen should find three major clinical uses.

One will be administration to patients who show signs of having the disease. A negative reaction will mean no immunity and therefore mumps is possible. A positive reaction will mean resistance to mumps and therefore a possibly different etiology for the symptoms presented by the patient. In many cases this may prevent an unnecessary quarantine of several days.

The second use for the test will be in the diagnosis of non-parotid mumps. In this type of infection, the area around the ear does not swell or otherwise indicate the presence of the virus. Other organs may be affected, however (orchitis, pancreatitis, etc.). Without the test, the physician would have to consider various other causes, such as venereal disease, if only orchitis is present.

The third use will be to test patients who show no signs of illness, but who have been exposed to the disease. This use should prove especially useful to the diagnostician, as mumps in an adult male may have serious consequences. If a negative reaction is obtained in such a case, mumps vaccine can be given immediately to prevent the disease.

The skin test is the third preparation intended for the control of mumps to be marketed by Lederle. The other two are a mumps vaccine and an antigen for the complement fixation test. The latter is used to determine the presence of mumps antibodies in the bloodstream. It is distinct from the skin test in that it is possible to have had the disease and not have complement-fixing antibodies continually present in the blood stream. Conversely, it is possible to have complement-fixing antibodies present without ever having had a clinical attack of the disease.

The skin test is supplied in 1 cc. ampules along with another ampule of control fluid. Each 1 cc. vial of antigen is enough for ten tests.

New Form of Achromycin

Sugar-coated tablets of Achromycin tetracycline have been placed on the market by Lederle Laboratories.

The orange-colored tablets containing 250 mg. of the broad-spectrum antibiotic are sold in bottles of sixteens.

Lederle also announced that its 250 mg. Achromycin capsules are now being sold in bottles of 100's. Achromycin was originally placed on the market as a 250 mg. capsule sold in 16's and has since been put out in 100 and 50 mg. sizes (sold in 25's), as well as in the Spersoid and intravenous forms.

Ilotycin I. V. Glucoheptonate

Ampoules Ilotycin I. V. Glucoheptonate (Erythromycin Glucoheptonate, Lilly) have been placed on the market by Eli Lilly and Co. The product is especially useful when initiating therapy in the very ill patient or when oral therapy is not practical. Ilotycin I. V. Glucoheptonate has been successful, in conjunction with antitoxin, in treating tetanus and diphtheria. The antibiotic is also useful in treating staphyococcus, streptococcus and pneumococcus infections.

Each ampoule of 'Ilotycin Glucoheptonate,' I. V., contains the equivalent of 250 mg. of 'Ilotycin' (Erythromycin, Lilly) base as the

sterile glucoheptonate in dry powder form.

Add 10 cc. of sterile distilled water to the contents of the ampoule and shake vigorously until the powder is dissolved. Note: Only sterile distilled water may be used as a diluent! The resulting solution is compatible with both physiological saline solution and 5 percent dextrose solution.

Dose:

For Adults: 'Ilotycin Glucoheptonate,' I. V., may be administered

- 1. By intravenous infusion Add the solution of 'Ilotycin Glucoheptonate,' I. V. to 250-500 cc. of saline or 5 percent dextrose and administer over twenty to sixty minutes. This may be repeated every six hours.
- 2. By continuous intravenous infusion Dissolve the contents of four to eight Ampoules (1 to 2 Gm.) 'Ilotycin Glucoheptonate,' I. V., in sterile distilled water and add to the amount of saline or 5 percent dextrose which will be administered over a twenty-four hour period.
- 3. By direct intravenous injection Slowly inject the contents of one Ampoule (250 mg.) 'Ilotycin Glucoheptonate,' I. V., dissolved in 10 cc. of sterile distilled water, directly into the vein over a period of at least five minutes.

For Children: 3 to 4 mg. per pound of body weight every six hours, administered as outlined above for adults.

Packaging:

'Ilotycin Glucoheptonate,' I. V., is available in 20-cc. rubber-stoppered ampoules (No. 524).

Pagitane Hydrochloride

'Pagitane Hydrochloride' (Cycrimine Hydrochloride, Lilly) is a potent antispasmodic drug intended for oral administration in the symptomatic treatment of all forms of Parkinson's disease, including the postencephalitic, arteriosclerotic, and idiopathic types.

Contraindications and Side Effects:

Use of 'Pagitane Hydrochloride' should be avoided in those conditions in which inhibition of the parasympathetic nervous system is undesirable.

Side-effects to be related to dosage and to the etiology of the disease in the individual being treated. Dryness of the mouth, blurring of vision, and epigastric distress are the most common and usually do not necessitate discontinuance of the drug. These minor sideeffects often disappear when the drug has been continued for one or two weeks.

No toxic effects were seen in any of the patients treated with 'Pagitane Hydrochloride.' Blood counts carried out in fifteen patients who had taken the drug for two or more months showed no changes attributable to the drug.

Administration and Dosage:

'Pagitane Hydrochloride' is a potent agent in the treatment of Parkinson's disease. The drug is administered by mouth, preferably with meals. The dosage must be individualized; it is influenced by the etiology of the disease and by other factors, such as the patient's age. In postencephalitic Parkinsonism the usual initial dose is 5 mg. t.i.d. followed by 2.5 mg. q.i.d. with a maximum dose of 5 mg. every two waking hours. In Arteriosclerotic and Idiopathic Parkinsonism the usual initial dose is 2.5 mg. t.i.d. followed by 1.25 mg. q.i.d. up to a maximum of 5 mg. q.i.d. How Supplied:

Tablets 'Pagitane Hydrochloride' (Cycrimine Hydrochloride, Lilly) are supplied in bottles of 100 and 1,000 as follows:

1:25 mg., S. C., Orange (No. 1783) 2.5 mg. S. C., Brown (No. 1784)

Erysipelas Vaccine

This country's first commercially-produced bacterin of proved effectiveness in the prevention of erysipelas in swine and turkeys has been placed on the market by Lederle Laboratories.

Erysipelas — also known as diamond skin disease in hogs — is a major disease problem in the swine industry annually causing damage estimated at well over a million dollars. It has been known to wipe out 50% to 75% of a farmer's pig crop.

It is also becoming an increasingly serious and costly problem in the turkey industry, killing upwards of 25% of many infected flocks.

The Lederle product — Duovax Erysipelas Bacterin — is prepared from a chemically killed culture of the disease-producing bacteria, and gives active immunity. Because the bacteria are killed, this product cannot spread the disease. No antiserum is needed with this bacterin.

The same organism causes erysipelas in both swine and turkeys.

Duovax will be injected under the skin of swine and into the thigh muscle of turkeys.

It is being sold in vials of 50 and 250 cc.

R. P.—PHARMACY'S OWN DESIGNATION

For years pharmacists have been deploring the lack of professional esteem and recognition extended to them by the public in some instances. A suggestion frequently made to aid the profession's public relations is to educate the public to call the pharmacist "Doctor" or for the colleges of pharmacy to award a "Doctor's" degree. For years many pharmacists have been affectionately called "Doc" by their customers but this has been more of a salutation than a recognition of the pharmacist's professional status. The New Jersey Board of Pharmacy and most particularly its Secretary, Mr. W. E. Powers, have been concerned with the lack of professional recognition and from time to time in various manners have attempted to enhance the professional stature of New Jersey pharmacists by campaigning against "cut rate" signs, the operation of pin ball machines in pharmacies, unprofessional advertising and other problems not specifically covered by the New Jersey Pharmacy. Act.

Recently Secretary Powers brought to the attention of the Board the fact that pharmacists generally, including the members of the Board, put too much stress upon their degrees, which only emphasizes to the public that there is a difference in the educational training of practicing pharmacists everywhere. The New Jersey Board members were guilty of this practice in signing permits and certificates as they always ended their signatures with the abbreviaton of their degrees. This was also done on Board stationery and most pharmacists in New Jersey include the abbreviation of their degrees on the signs required by law to be displayed on the windows of pharmacies listing the name of the registered pharmacist in charge. Why should pharmacists point out to the public so specfically that some did not receive any formal college education, others

have a "Ph.G." or a "Ph.C." or a "P.D." degree obtained after a varying number of years in college, still others have a "B.Sc." degree and some few use the designation "R.P." or "Reg. Ph." The five year course in pharmacy, which is being adopted in more and more colleges of pharmacy, could even presumably lead to the use of still another abbreviation. The Secretary pointed out to the Board that there are only approximately 3,000 pharmacists practicing retail pharmacy full time in New Jersey which makes this a very select professional group. Each has a certificate reading "Registered Pharmacist" and it is logical and proper to use exclusively the abbreviation "R.P." Physicians are designated "M.D.", nurses "R.N.", dentists "D.D.S.", etc. The Board decided that it will immediately discontinue the use of degrees and, as quickly as it can be initiated, permits, certificates, letterheads and other material bearing the names or signatures of the Board members or Secretary will bear exclusively the abbreviation "R.P." after each name. The Board also decided to give consideration to promulgating a regulation which will require uniformity in the display of the name of a pharmacist in or on the window of a pharmacy using the designation after the name of "R.P." In addition, the Board is planning to initiate an educational campaign to New Jersey pharmacists to popularize the use of the designation "R.P." along with the pharmacist's own name in the operation of pharmacies and in advertising. Furthermore the Board plans to encourage the greater use of the designation "pharmacy" rather than "drug store" in the thought that the term "pharmacy" is the exclusive property of the profession. It is hoped that this small effort will meet with the approval of pharmacists elsewhere and that the term "R.P." will become an exclusive and emphatic designation of the registered pharmacists of our country.

DIVISION OF PHARMACY NEWS

Rho Chi Meeting. Tau Chapter of Rho Chi Honorary Pharmaceutical Society held a short business meeting January 20 under the leadership of president Ed Staudenmier.

A Rho Chi charter petition from the University of Arizona School of Pharmacy was discussed. Tau Chapter cast a vote in favor

of granting the charter.

An initiation ceremony will be held for new members Wednesday, February 17. Immediately following the ceremony the annual Rho Chi Banquet will be held. Members to be taken into the Society at that time are Richard E. Angerhofer, Twin Brooks; Floyd H. Bly, Brookings; Robert Allen Exon, Lake Andes; Sheldon D. Murphy, Forestburg; and Marlin B. Radtke, Fairbault, Minn.



Mr. Bliss C. Wilson at Aberdeen District Pharmeceutical Meeting Jan. 17, 1954.

ABERDEEN DISTRICT MEETING

The Aberdeen District Pharmaceutical Association held its first meeting of 1954 at the Alonzo Ward Hotel, January 17.

Dick Daniels, Association President, presided over the meeting. Bliss Wilson, State Secretary, was introduced and gave a short talk on the State Convention which is to be held in Aberdeen in June.

Mr. J. J. Wyckoff of Minneapolis, Minn., and James Freeman of Sioux Falls, S. D., representing Johnson and Johnson, presented a very interesting program for the group.

A social hour followed the dinner and meeting.

Out of town guest were:

Mr. and Mrs. Fenn

Mobridge, S. D.

Mr. and Mrs. N. R. Glarum Fredrick, S. D.

Mr. and Mrs. Clayton Dietz Groton, S. D. Mr. and Mrs. Edwin Vail Gettysburg, S. D.



Mr. J. J. Wyckoff of Johnson and Johnson, addressing Aberdeen Pharmaceutical Meeting Jan. 17, 1954.

RAPID CITY PHARMACISTS MEET

Sheriff Glen Best was guest speaker at the February meeting of the Rapid City Pharmaceutical Society.

In his talk he outlined the procedure that should be followed in the handling of bad checks. He stressed the point that the intentional bad check writer will work on the theory that the average busness man will not prosecute immediately on an insufficient check. Only one dollar in the bank will give this bad check artist time to work the entire town for as long as a two to three weeks period.

Sheriff Best made the suggestion that to avoid forgeries we should check the individual's drivers license and compare signatures before cashing a check. Every man and woman above the age of fifteen, in every state in the union, are required to carry a drivers license if they operate any form of a motor vehicle.

All members of the Society present pledged support to his plans in the future for lawful procedure in handling these checks.

The store owners present felt that we

should have a representative from each store meet periodically with the States Attorney and the Sheriff to discuss and improve all possible procedures in the handling of such criminal acts.

In the business meeting following, all plans were completed for the annual Doctor's and Dentist's party to be held on February 11. It was agreed that all stores would be closed at 6:30 that evening so all members could attend.

AUDIO-DIGEST AVAILABLE

National distribution of tape recordings of the latest medical information, a new method of communication, has been undertaken by the California Medical Association through its recently-formed non-profit subsidiary, Audio-Digest Foundation.

Using tape recorded material, the Foundation makes available to doctors everywhere three "postgraduate services" designed to save their time while increasing the scope of their practice-useful knowledge.

The basic service is the weekly issuance of a one-hour tape for general practitioners. On it are recorded 20 to 30 abstracts of the best in current literature embracing all medical fields. Articles are screened by a board of medical editors headed by Edward C. Rosenow, Jr., M.D., Pasadena, editor in chief. As a corollary service, Audio-Digest offers semimonthly digest in the field of surgery, internal medicine and OB-Gyn. The third service is lectures and panel discussions on one-hour reels for individual or group purchase. Many of these lectures are illustrated by film strips made from the speaker's own slides.

"One of the most popular featurs about these recordings," Dr. Rosenow said, "is that they are of definite, practical and immediate value to the phylician. Much of the literature digested would not ordinarily come to the busy practitioner's attention. And the advantages of hearing world-renowned authorities in medicine and surgery at his own hospital staff meetings or in his own living room are obvious."



by W. D. Paul, M.D. Iowa City, Iowa

Among the increasing progeny in the family of antibiotics, penicillin is the only teenager. It was thirteen years ago, in Britain that penicillin received its first trials in human patients. In the same year, 1941, Florey and Heatley visited the United States to enlist the aid of the American government and the American pharmaceutical industry in the development of large-scale production of the new antibiotic.

Thus at the age of 13, clinically speaking, penicillin is the senior member of what has become a celebrated family. The interval since 1941 has witnessed the birth of many other antibiotics. Some were born prematurely and succumbed. Others failed to survive the rigors of early childhood or grew up with congenital defects that have not yet been entirely overcome. Several were hailed as infant prodigies. Of these none proved to be a universal genius, but a few are recognized for excellence in special fields of endeavor.

Penicillin, however, with its record of solid achievement in the accomplishment of a multitude of everyday tasks, deserves a major share of the credit for the accomplishments of the entire antibiotic family. By common medical consent it is the drug of choice in the treatment of an impressive number of the bacterial infections most frequently encoun-

*From Division of Physical Medicine, Dept. of Internal Medicine, University of Iowa, Iowa City, Iowa.

tered in clinical practice. Indeed, among all communicable diseases which respond to antibiotic therapy, and for which an antibiotic other than penicillin is preferred, only tuberculosis, whooping cough and bacillary dysentery have a reported incidence of any considerable magnitude. 1 We should bear in mind that certain of the newer antibiotics gain a broad spectrum by virtue of their action against organisms that rarely claim the physician's attention. Though the microbial spectrum of penicillin is limited, in adequate concentrations it is bactericidal against sensitive organisms, and not merely bacteriostatic, as are aureomycin, chloramphenicol and terramycin.2

Upon attaining teen age, penicillin has already transformed the management of several diseases of major importance. To realize this, we have only to recall the not so distant era when pneumococcic pneumonia called for the use of typed serums and prolonged oxygen therapy, or the even more recent days when the sulfonamides were welcomed as a significant advance, despite the toxicity of the forms then available.

Streptococcic infections, including septic sore throat, scarlet fever, erysipelas, acute otitis media and even bacteriemia, yield to penicillin, which is also useful in the prophylaxis of rheumatic fever. Penicillin alone, and in combination with streptomycin, has removed subacute bacterial endocarditis from the category of diseases which have an almost

uniformly bad prognosis. Penicillin is "unquestionably the drug of choice in cutaneous anthrax." It is effective against non-resistant strains of staphylococci and is an important adjunct in the therapy of gas gangrene, clostridial infections, actinomycosis and certain chronic respiratory tract infections. The triumphs of this drug are well recorded in the changing picture of the control of venereal infections. Penicillin therapy has proved that the tedious irrigations formerly employed in gonorrhea and the 18-month course of treatment of syphilis with heavy metals now belong to the past.

Hinshaw⁴ has noted four outstanding attributes of penicillin: (1) It is bactericidal in high concentrations. (2) High concentrations in blood and tissue are attainable, since dosage may be increased almost without limit, if necessary, without toxic effect. (3) High concentrations also broaden the spectrum of activity of this drug. (4) Penicillin acts synergistically with some other drugs.

Of all the antibiotics, penicillin most nearly approaches maturity as a drug. Its action has been the subject of thousands of laboratory and clinical investigations. The serum concentrations at which it has proved effective against various organisms have been widely reported in the literature. The product itself is now available in a large variety of dosage forms, and the physician has increasing latitude to select the route of administration and still attain a significant serum level over an extended period of time.

In the face of this remarkable growth, it would be strange if penicillin failed to exhibit certain teen-age problems which may cause us concern. Those who have had early experience with penicillin — and certainly this includes a majority of those present - are not entirely blameless for inadequacies of penicillin therapy. The drug performed its indicated tasks so well that there was often a temptation to use it needlessly. Injudicious use of penicillin in relatively minor infections has its logical aftermath in the unnecessary sensitization of individuals for whom the drug should have been reserved for a time of real need and ,to a lesser extent, the emergency of reistant organisms, replacing those sensitive to penicillin. These are real problems, but they are problems which can be resolved, like those confronting the human adolescent.

The literature is replete with reports of penicillin reactions varying from fleeting rashes to urticaria, serum sickness-like reactions, exfoliative dermatitis and the more severe and sometimes fatal anaphylactic shock. 5. 6. 7. 8 There appears to be no consensus regarding the extent to which the population of this country has been sensitized to penicillin, though writers assume that a gradual increase has occurred and base this observation on the fact that most patients have already received the drug once and some of them repeatedly.

Lewis, Hendricks and Welch of the Food and Drug Administration,9 state that with parenteral administration of penicillin the incidence hypersensitivity reactions pears to be from 1 to 3 percent. They believe that the figure will be higher when the drug is applied topically as in an ointment. The reactions which are most commonly encountered include skin eruptions, fever, edema of the skin and mucous membranes, and arthralgia. Fortunately the symptoms are usually mild and will disappear within a few days if penicillin is stopped. In some instances the reaction may subside even with continued treatment, while in a few, urticaria may develop and persist several months after the last dose of the drug. In 1953, in a survey of 95 large hospitals with a total capacity of over 51,000 beds, the Food and Drug Administration recorded 59 acute anaphylactoid reactions due to penicillin over a two-year period, with 19 deaths.8 In a third of the cases there was a history of bronchial asthma, hay fever, or other allergies. A history of sensitivity to penicillin was less frequent. With such patients, it was pointed out that the physician must balance the hazards involved against the extent and nature of the disease being treated.

In view of the recent trend toward the administration of oral penicillin, it is interesting to note that only one of the untoward reactions reviewed in the Food and Drug Administration survey, followed the use of the drug in this form. This is consonant with a general impression among clinicians that oral administration is less productive of sensitivity than parenteral administration. White, reported only 21 mild reactions after giving 23,544 prophylactic oral doses of 500,000 units

each,20

Institution of penicillin therapy in the face of previous sensitivity to the drug, or a personal or familial history of allergy, is a case for the clinical judgment of the physician. A patient who is found to be sensitive to procaine may tolerate penicillin in the form of its soluble salts. If the sensitivity is to penicillin itself, it may be wise to employ one of the broad-spectrum antibiotics or, if the need for penicillin is sufficiently great, to use it with the aid of an antihistaminic or epinephrin. ACTH or cortisone before and during penicillin therapy has been used to safeguard sensitive patients;5 however this should be done cautiously as the corticosteroids may enhance the infections. The treatment of exfoliative dermatitis⁵ and of urticarial reactions⁷ with cortisone is also reported. The Food and Drug Administration recommends that resuscitative agents be readily available for emergency intravenous administration in those rare instances when anaphylaxis occurs. Desensitization procedures for penicillin have been described.7

While there is not complete agreement on the value of the results of skin tests, Kern and Wimberley⁵ believe that anaphylaxis, the most dangerous type of sensitivity, can be usually recognized by the immediate whealing reaction on cutaneous or intracutaneous testing.

In reporting the survey of the Food and Drug Administration, Welch, Lewis, Kerland and Putnam⁸ note that, although the incidence of anaphylactoid reactions has increased in frequency during the past few years, it is still relatively infrequent when consideration is given to the tremendous tonnage of penicillin distributed annually. These authors comment that "practically all drugs are potentially capable of sensitization, and systemic penicillin can be considered to have a low sensitizing potential."

On the other hand, the broad-spectrum antibiotics sometimes lead to such disturbing symptoms as nausea, vomiting, diarrhea, prupritus or even fistulae which may incapacitate patients for many weeks, yet they are none the less valued as life saving drugs. Obviously it is necessary to appraise the unfavorable results of any agent in the light of the favorable results for which it is responsible.

As the New England Journal of Medicine has re-emphasized in a recent editorial, 10 physicians know that any drug can harm some persons while saving thousands, and we as physicians should prescribe where possible a specific remedy for a specific purpose. We should know and anticipate the dangers and should closely follow our patients. After making these sound observations the writer of this editorial offers a timely and sensible antidote to current manifestations of alarmism. They state that the few inevitable cases of untoward reactions should not be magnified out of proportion. Frightening the physician or his patient away from the proper use of a drug can cause more harm than that occurring as a side effect of a drug when it is properly used.

There exists a popular impression, shared to some extent even by the medical profession, that "the antibiotics are losing their punch," due to a rapid development of resistant micro-organisms. Any such dogmatic assertion regarding penicillin certainly requires qualification in the light of the observed facts. On examination, the case for increased bacterial sensitivity to penicillin is chiefly based upon reports describing insensitive strains of staphylococci. Romansky and Kelser,11 as of 1952, stated that "to date the pneumococci and group A beta hemolytic streptococci, the organisms most commonly found in diseases of the respiratory system, have shown no evidence of development of resistance to the available agents." In the same year, Garrod in Britain, told the Royal Society of Medicine¹² that while most bacteria can be habituated to penicillin in the laboratory, this ordinarily does not happen in the body, except in the case of staphylococcus. And more recently Perrin Long¹³ could find "no clear evidence that Beta hemolytic streptococcal, pneumococcal, meningococcal, gonococcal, or treponemal infections have become appreciably resistant to the antibacterial effects" of penicillin.

Studies such as that of Rantz and Rantz, ¹⁴ in which 83 of 120 strains of **Staphylococcus Aureus** were sensitive to penicillin, have been conducted in hospital laboratories with material taken from infected patients. While a high incidence of resistant staphylococci is associated with a hospital environment, a different condition is encountered in office and

out-patient practice. As these same investigators point out, "the 'wild' staphylococci in the respiratory tracts of the general population are still not highly resistant to antimicrobial agents." The mechanisms by which previously sensitive bacteria acquire resistance to drugs are a subject of controversy among microbiologists. 12 Becker and Beard 15 remind us that "while antibiotics as such have been only recently put to work by man, they have been present in nature for millenia." They suggest that 8 percent of the staphylococci pathogens, such as staphylococci, non-hemolytic streptococci and enterococci, possess an adaptability, due to mutation, for meeting the challenge of antibiotics. In this connection, it is interesting to recall that Sir Alexander Fleming, upon his arrival in this country last year, was quoted as saying that the resistant staphylococci, which he said were then involved in 50 percent of such infections treated in hospitals, and 10 percent of the cases treated outside hospitals, actually are strains that were resistant to penicillin before it was discovered.

It is clear, of course, that once resistant strains emerge, they tend in the presence of antibiotics to replace organisms that are sensitive by a process of selective breeding, whether the resistance be inherent or acquired. The importance of careful bacteriologic studies to guide the clinician in the selection of a chemotherapeutic agent, when organisms are resistant to penicillin and possibly to other antibiotics as well, will be apparent. Superinfection, as a consequence of the destruction of the normal bacterial flora of the intestinal tract, is not a common problem with penicillin, but it is a problem of the broad-spectrum antibiotics and is perhaps a contraindication to their prolonged administration.

Secondary vitamin deficiencies have also been observed following long use of the broad-spectrum antibiotics. These may be remedied by vitamin supplements but it is not so simple to manage an invasion of clinical moniliasis or micrococcic enteritis. David T. Smith¹⁶ offers the thesis that "constant and deadly warfare is carried on between grampositive cocci and gram-negative bacilli and between both these groups and the yeast and moldlike fungi" and that consequently "the precarious balance maintained by the normal

ecologic flora is upset easily by the administration of antibiotics."

More recently Llewellyn¹⁷ has made a comparable report on the superinfection problem. While most writers are concerned chiefly with new clinical syndromes that were observed following the extended use of the broader coverage antibiotics, they are mindful that even the use of penicillin calls for vigilance on the part of the physician when the drug is employed over many weeks, as in chronic pulmonary infections. In fact, before any antibiotic is used, the indications, in Llewelyn's view, should be positive and where possible, the bacterial agent should be identified and the range of its antibiotic spectrum accurately established.

In the thirteen years since penicillin was introduced, the pharmaceutical industry has shown remarkable ingenuity in solving a host of problems, including its purification, production of the drug in large volume and at low cost, and the development of new product forms offering such advantages as stability at ordinary temperatures and elevated and prolonged serum levels provided either by the oral or parenteral routs of administration.

In choosing a dosage form to meet a specific need, or combination of needs, the physician has at his disposal today a wide variety of products. Repository forms,incorporating the procaine salt of penicillin, account for a major share of the penicillin now distributed in the United States. These forms are prepared for intramuscular injection and permit the treatment of ambulatory patients, as well as bed patients at home or in the hospital, on a flexible schedule. Absorption of the drug from its tissue depot is slowed because of its relative insolubility so that somewhat low but therapeutically significant blood levels are well sustained.

Crystalline procaine G. penicillin in oil with 2 percent aluminum monostearate, a water-repellant agent, provides measurable penicillin concentrations in the blood stream for as long as 96 hours, though the intervals of administration are usually no more than 48 hours apart. This product is the one of choice for the treatment of syphilis and other treponemal diseases of world-wide significance. Procaine penicillin is also available in aqueous suspension, permitting high initial blood levels while requiring more frequent

injections.*

Penicillin in the form of its potassium salt remains in use where sensitivity to procaine is demonstrated or in severe infections calling for a high serum concentration. It is sometimes combined with procaine penicillin to achieve a "booster" effect: that is, high initial concentration in addition to prolonged activity.

Even more prolonged activity is obtained with dibenzyl-ethylenediamine di-penicillin G (DBED penicillin).* The drug remains in the blood at a low therapeutic level for as long as 1 to 4 weeks and seems to have a special usefulness in the prophylaxis of rheumatic fever.

Certain agents such as caronamide have been combined with penicillin as a means of slowing renal excretion by selective blockage. While such combinations serve to prolong the serum concentrations, and equally high level can be maintained by using the potassium penicillin salt in conjunction with an oil-type vehicle. Under these circumstances the wisdom of introducing another potential toxic agent and disturbing renal function, can be questioned.

Penicillin therapy by the oral route is gaining in favor with the development of satisfactory dosage forms and the knowledge that the danger of sensitization is at a minimum when this method is employed. Although oral therapy is contraindicated if high or unusually prolonged blood levels are required, as in syphilis or meningitis, it is quite sufficient for the control of most penicillinsensitive organisms. As early as 1945, we demonstrated that oral penicillin was effective in the treatment of gonorrhea and in the complications of scarlet fever.²¹ Later we were able to show that penicillin orally, provoked a Herxheimer reaction in early syphilis.²² Regression of the cutaneous lesions of syphilis occured after oral penicillin.23 Oral medication was also effective in ocular inflammations and acute infections of the nose and throat.^{24, 25} It possesses the advantage of greater acceptability by the pa-

*Examples of the procaine penicillin with aluminum monstearate are Flo-Cillin "96" (Bristol) and Penicillin G. Procaine (Crystalline) in Oil with 2% Aluminum Monostearate, 300,000 Units Per CC. (Parke, Davis); of the aqueous suspension, Flo-Cillin Aqueous (Bristol) and Penicillin G Procaine (Crystalline) Aqueous Suspension, 300,000 Units Per CC. (Parke, Davis).
*Bicillin (Wyeth)

tient. The medication is usually taken shortly before, or for some time after meals, and it does not require the presence of a doctor or nurse for administration.

Compressed tablets, each containing, for example, 200,000 units of crystalline potassium penicillin G are by now a well established product form.* More recently, a stable liquid preparation containing potassium penicillin has been developed. It is now available in a palatable creamy vehicle** as a new and convenient source of penicillin for children, as well as for adults who prefer liquid medication.

After thirteen years, penicillin is a vigorous teen-ager. Production of the drug in 1953 totaled 350 trillion units, equivalent to 231 tons. If one assumes that 40 percent of this penicillin production is used for animal therapy, feed enrichment and for the export market, there remain 138 tons, sufficient for four average doses for every American. This is an impressive record for a new drug. The magnitude of production has been accompanied by a steady drop in price, which, at the manufacturing level, stood last year at 6 cents per 100,000 units. This compares with 60 cents as recently as 1947 and \$30 in 1943.

From a rare drug, penicillin has become a staple in the therapeutic armamentarium of the physician. Although its very success has led to its abuse in many instances, penicillin without doubt has saved countless lives and prevented untold suffering.

What of the future? Doubtless new antibiotics will continue to appear, many of them possessing marked advantages for special purposes. However, there is no present prospect of a chemotherapeutic agent that will rival penicillin in high specificity for common infections, combined with low toxicity. Among a group of children of non-allergic constitution, not even aspirin showed the same freedom from side effects as penicillin.¹⁸

Penicillin seems destined for the role of Goliath against the great killer, syphilis. As the chain of infection is gradually broken in the United States the drug is finding increased use in tropical countries where not only syphilis but other treponemal diseases, such as yaws, pinta and bejel, are prevalent.

^{*}Pentids (Squibb)
Duracacillin Buffered Tablets (Lilly)
**As Cilloral Suspension (Bristol).

Recently a triple penicillin was evolved which combines in each dose 300,000 units of the potassium salt for an initial high blood concentration, 300,000 units of procaine penicillin for a sustained intermediate level and finally 600,000 units of DBED-penicillin for a prolonged concentration of 15 days or longer. Preliminary clinical data are reported as highly encouraging. 19 A combination of this type may well prove of exceptional value in eradication programs conducted in underprivileged countries, where patients must often be treated on a single injection basis in rural clinics. While the potassium penicillin constituent effects a higher initial level than is required by the low sensitivity of treponemal organisms, it will be of undoubted value in the numerous cases in which considerable secondary infections is present.

Thus, by ingenious combinations of the virtues of different product forms of penicillin, medical science has moved a little closer. to a realization of Ehrlich's dream of a single chemotherapeutic agent, effective in a single dose against all disease organisms.

We may hope that penicillin will move toward healthy adulthood and that its increasing maturity will be marked by greater respect for its clinical indications, proper attention to bacteriologic studies and the development of more helpful tests for ascertaining the probable reaction of patients to the drug.

It seems likely that the efficiency of penicillin against various acute and chronic infections will be further enhanced by improved knowledge of dosage forms and administration. A role of increasing usefulness seems to await penicillin in the prophylaxis of patients about to undergo surgery, as for example older patients in whom the prevalence of valvular and endocardial lesions is a predisposing factor to subacute bacterial endocarditis.

SUMMARY

1. The therapeutic effectiveness of penicillin in a number of bacterial infections of high incidence, is appraised, thirteen years after its introduction into clinical practice.

2. Sensitivity reactions to penicillin, ranging from transitory rashes to anaphylactic shock, are a reminder of the need for clinical vigilance but should be weighed against the remarkably good results obtained in a far greater number of cases and the hazards of alternative therapies.

3. The problem of bacterial resistance to penicillion in vivo is seen to be largely one of certain strains of staphylococci in which resistance appears

to be inherent, at least in part.

4. New product forms of penicillin are mentioned, including preparations that effect prolonged concentrations in the blood serum or achieve satisfactory results by the oral route of administration.

5. The future of penicillin is discussed, including the significance of new combinations to facilitate the treatment of mixed primary and secondary infections in tropical countries by a single injection.

REFERENCES

Reported Incidence of Communicable Diseases in the United States, 1950, Public Health Re-ports: 66:673, 1951.

ports: 66:673, 1951.
 Flippen, H. F.: Antimicrobial Therapy of Bacterial Pneumonias, Postgrad. Med., 14:6, 1953.
 Welch, H., and Lewis, C. N.: Antibiotic Therapy, Arundel Press, 1951, p. 529.
 Hinshaw, H. C.: The Treatment of Infectious Diseases, Calif. Med., 79:282, 1953.
 Kern, R. A., and Wimberley, N. A.: Penicillin Reactions: Their Nature, Growing Importance, Recognition, Management and Prevention, Am. J. Med. Sciences, 226:357, 1953.
 Sterling A: Anaphylactic Shock Following

Med. Sciences, 226:37, 1935.
 Sterling, A.: Anaphylactic Shock Following Penicillin Therapy in Bronchial Asthma, J. Allergy, 24:542, 1953.
 Herrell, W. E.: Reactions of Toxicity Incident to Antibiotic Therapy and Their Management, Ann. Allergy, 11:555, 1953.
 Welch, H. Lewis, C. N. Markey, L. and Datasey

8. Welch, H., Lewis, C. N., Kerlan, I., and Putnam, L. E.: Acute Anaphylactoid Reactions Attributable to Penicillin, Antibiotics & Chemotherapy, 3:891, 1953.

Lewis, C. N., Hendricks, F. D., and Welch, H.: Antibiotics in Clinical Practice, M.D., 5:207,

New Eng. J. Med.: 248:1075, 1953.
 Romansky, M. J., and Kelser, G. A.: Antibiotics and Chemotherapeutic Agents in Infections of the Respiratory Tract, J.A.M.A., 150:1447, 1952.
 Proceedings of the Royal Society of Medicine: 45:321, 1952.

Long, P. H.: The Abuses and Uses of Antibiotics, N. Y. St. J. Med., 53:2222, 1953.
 Rantz, L. A., and Rantz, H. H.: Sensitivity of Various Clinically Important Bacteria to Four Antibiotics, Stanford Med. Bull., 11:183, 1953.

15. Becker, Jr., S. W., and Beard, H. W.: The Changing Antibiotic Spectrum, Bull. Am. Soc. Hosp. Pharm., 10:489, 1953.
16. Smith, David T.: The Disturbance of the Normal Protection.

Bacterial Ecology by the Administration of Antibiotics with the Development of New Clinical Syndromes, Ann. Int. Med., 37:1135, 1952.

Llewellyn, J. S.: Hazards of Antibiotic Therapy, J. Ky. St. Med. Assn. 51:386, 1953.

Berkovits, M., Glaser, J., and Johnstone, D. E.: The Incidence of Allergy to Drugs in Pediatric Practice, Ann. Allergy, 11:561, 1953.

19. Rein, C. R., Buckwalter, F. H., Mann, C. H., Landy, S. E., and Flax, S.: Time-Dosage Relationship in the Treatment of Treponemal Diseases with a New Combination of Three Penicillin Salts. Laboratory and Clinical Basis for Effective Therapy. J. Invest. Dermatology, 21,435, 1953. 21:435, 1953

White, C. B.: Reactions to Penicillin Given Orally in Mass Prophylaxis, U. S. Armed Forces Med. Jour., 4:1606-1609, 1953.

21. Paul, W. D., Rhomberg, C., McKee, A.P., and Pichette, J. W.: Administration of Penicillin by Mouth in Combination with Aluminum Dihydroxyaminoacetate, Jour. Ia. State Med. Soc., 35:219-221, 1945.

(Continued on Page 138)

Welcome

to the

STATE MEDICAL ASS'N. CONVENTION THE MARVIN HUGHITT HOTEL

Located in the Center of the State

Make Our Hotel Your Headquarters
For Meetings & Conventions

Huron

South Dakota

Welcome S. D. MEDICAL CONVENTION

TO HURON

Humphrey's Drug Store
Fellowes & Clarke Pharmacy
Perriton Drug & Jewelry
Wheeler Rexall Drug
Schwartz Pharmacy



PSYCHOLOGICAL ESSENTIALS OF GENERAL PRACTICE

Franklin G. Ebaugh, M.D., Denver, Colorado*

The importance of the physician understanding practical medical psychology - appreciating and applying psychiatric principles in his general medical work - has been brought forceably to our attention by two recent nation-wide conferences on psychiatric education.1 Hopefully, when some of these recommendations are put into effect the level of undergraduate medical education, and thereby the level of general medical practice, will be markedly improved. More and more we are beginning to recognize that applied medical psychology is a basic science of medicine, as important to the effective practice of clinical medicine as biochemistry, anatomy or general physiology. More and more medical educators are recognizing this, and psychiatric education in medical school consists of much more than a few lectures on dementia praecox, organic reaction types and commitment procedures for the "insane." Much remains to be done to integrate the more useful knowledge we have into the medical student's thinking. An equally important task for the psychiatrist is to put forth some of this material in a usable form for our fellow physicians in non-psychiatric fields who most likely have had only the most fleeting and unsatisfactory exposure to psychiatry in medical school. This will be my task in outline today.

*Clinical Professor of Psychiatry, University of Colorado, School of Medicine

Read at the South Dakota State Medical Association, Rapid City, South Dakota, June 16, 1953.

Learning how to handle patients is one of the primary requisits of an adequate physician. A physician is not a salesman, but like a salesman he must understand and be capable in his handling of people. This is often a rather upsetting idea, and often a threatening one to the young scientist just going into practice. He is eager to have the world beat a path to his door, begging for the accurate scientific help he has been trained to give. Often he has come to scorn the methods of the older practitioner with his bedside manner. He vows his practice will include no misspent time with what he calls 'neurotic', healthy or otherwise. If he is in a specialty which is in great demand, or in an area without competition, he may complacently and profitably go along ignoring his patients as humans, but should he be competing against others who have a more mature and helpful understanding of people, he will soon either learn, starve or leave. Knowing how to handle people is not only an essential of good medicine, it is often an economic necessity.

To illustrate this a little further, let us take the example of the angry patient. One of the most difficult problems we have as physicians is in handling these resentful, hostile people. We all want to be liked and most of us need very much to feel we are helping others. A patient who shows anger at us undermines our self-esteem. We may react to this attack with counter attack, call him an ingrate or neurotic to ourselves, and quickly dismiss him with varying degrees of courtesy from our presence. And yet we may be left with

the unpleasant feeling we have dismissed a sick person who needs our help, or we may have vague, guilty stirrings suggesting that perhaps it was our fault. We may even fear the harm that his malicious tongue can do to our reputation or practice. Learning to handle such people takes patience and time. It may also take many unpleasant episodes and much self-evaluation before we can handle anger in our patients when it is directed against ourselves. On the other hand, an attempt to find out why the patient is angry, or to listen to his problems, may allow us not only to know the pleasure of eliminating his anger toward us, but of giving help to a person who obviously needs it. So often the angry person is that way because he is scared, scared of us or of his own illness. He needs help in overcoming his fears just as much as the openly fearful person who appeals to us directly for our help.

Today, as always, the physican needs to be more than just a therapist for disease, physical or mental. Much help can be given to a family by the family physician and really by nobody else. A very cogent example is the help the family doctor may give a couple who have a defective child. Often we find the parents so overwhelmed with guilty feelings about the child that they are unable to handle the problem wisely for their own, the child's or the best interests of other siblings. Many other examples can be given in which the doctor, armed with practical psychological skills, can do inestimable good for his patients in essentially non-medical fields.

Let us turn again to medical problems to illustrate the value of psychological knowledge in dealing with patients. A few examples, will suffice. In patients with cardiac complaints, many will be found having symptoms on a functional, non-organic basis. Rangell² has estimated that the majority of patients with cardiac complaints will have no organic disease to be treated. When disease does exist, emotional problems may worsen the symptoms and the prognosis. This is particularly clear in cases of congestive failure, angina, or where a myocardial infarction has occurred. The need to recognize and to help alleviate the anxiety with such difficulties will often pay off in a smoother clinical course. Here the fallacy of "either/or" concept2 — either organicity or neurosis — is most clear.

Often if the patient can "accept" his illness for what it is, the first successful step in treatment has been taken. The inability of a successful, driving business man really to accept the implications of a myocardial infarction can often lead to premature death or total disability. Many patients are too upset by the implications of our diagnosis to accept it. As physicians it is as important for us to be sure the patient can emotionally understand what we have told him, and accept it, as it is to give the correct pharmacological prescription.

In the fields of physical rehabilitation³ and tuberculosis this problem is particularly acute. Here the utmost cooperation of the patient for long periods of time is necessary. And even after the acceptance of the disability has taken place, new problems arise. Any chronic illness leads, of necessity, to the patient's becoming very dependent on his doctor. With dependency often come demands, and anger when these demands are not met. Realizing this as a normal concomitant of long-standing illness, the physician will be able to understand, accept and deal with these feelings, instead of regarding the demanding patient as an "ungrateful nuisance."

In the realm of surgery a knowledge of emotional reactions can be valuable both prophylactically and in handling emotional problems when they arise postoperatively. Here again it is necessary for the patient to understand clearly what is likely to be the outcome postoperatively. It behooves the surgeon to be sure the patient really accepts what is to happen, lest he or she awaken a few days postoperatively to the realization that an important part of the anatomy has been removed. Different organs have different importance to us, quite apart from their logical utility. Generally, the more "sexualized" an organ is, the more anxiety will be associated with tampering with it, e.g., the uterus, the breasts, the prostate, etc.

I should like to emphasize again that this is the type of treatment that can be used effectively and practically by the non-psychiatric practitioner. It does not aim at basic changes in your patient's prsonality and character — that is only accomplished by psychoanalysis, if at all. Basically it is aimed at

helping your patient with current emotional problems which are producing unhappiness for him and his family. I like to think of this as a splinting of a personality which has been temporarily injured. This is certainly comparable to our splinting of fractured bones in orthopedic practice. Once we have helped him to realign himself by our help, then this support, this splint, can be withdrawn and the old personality relied upon to carry on again.

In children in particular, careful preparation of the child emotionally will payoff in terms of fewer anxiety reactions postoperatively. Levi⁵ as well as Strecker⁴ have pointed out the frequency of acute anxiety reactions in children under 3 or 4 who have had operations using general anaesthesia. These reactions, often quite prolonged, consist of generalized anxiety in many situations, with nightmares, poor sleep, fear of the dark, and often various phobias. This has led to the recommendation that elective surgery be postponed until after this age.

In the field of obstetrics there is, as Parks⁶ has noted, a historical indoctrination that childbirth is an ordeal, painful and difficult. Its terminology with such words as labour pains, lacerations, forceps, rupture of the membrane, hemorrhage and abortion are hardly likely to allay apprehension when used by the obstetrician in the presence of the expectant mother. When the physician can recognize such signs as excessive nausea and vomiting during pregnancy, interest in the morbid details of pregnancy, revulsion at the thought of breast feeding and demands for complete narcosis as suggestive evidence of rejection of pregnancy, or at least as evidence of severe conflicts surrounding the whole thing, then much can be done to correct it before the child comes.

In no illness is it more important for the patient to have an understanding physician than when afflicted with cancer. It is clear that if we know what cancer means to the patient, what special fears he has about the disease, we are in a much better position to handle him helpfully, and to give him real emotional comfort in the remaining months or years of his life. As Shands et al have pointed out, many of us become disturbed by the patient's downhill course and avoid discussing his or her emotional problems. This the patient views as lack of interest or rejection, which

increases the feeling of hoplessness. Diligently and helpfully attending the dying carcinoma patient is not an easy task for any of us, yet it it a duty that cannot be shirked even after we can do no more with medicine or surgery.

These are just a few examples of areas in which we can, as physicians more effectively handle our patients' medical problems by applying common sense principles of medical psychology. These are examples drawn from the positive side. On the other hand, as is implicit in the Hippocratic oath, we wish to practice medicine so as to do as little harm as possible to our patients. We all know of physicians - luckily rare - who seem to enjoy deliberately scaring patients and hurting them psychologically, not to mention physically. Many of us quite unwittingly harm our patients psychologically through ignorance or just plain carelessness in what is said within the patient's hearing. "Iatrogenic"8 is the term applied to disorders caused by the physician, and is a subject I will cover more thoroughly this afternoon. Unnecessary examinations, laboratory studies and operations on patients whose complaints are clearly neurotic in origin can fix the symptom and make its future treatment more difficult.

Another practical application of psychiatric knowledge in the general practice of medicine occurs in the diagnosis and treatment of physical disorders showing up initially or most clearly as psychiatric abnormalities. It cannot be emphasized too strongly that the nervous system may act as a "reflector of bodily diseases,"9 of pathology elsewhere than in the nervous system. So often when we observe psychiatric symptomatology, we assume immediately that here is a problem for the psychiatrist and refer it as such. Often patients are referred who are suffering from metabolic, endocrinological or other toxic disorders, showing up clinically primarily with nervous system dysfunction.

Islet cell adenomas of the pancreas with symptoms of weakness and fatigue, anxiety, irritability, and in more severe cases with convulsions and delirium, may be mistaken for psychogenic disease. Hyperthyroidism often gives marked emotional instability with distractibility and euphoria, occasionally leading to a delirious reaction. Mild hypothyroidism may produce lethargy, chronic fatigue

with slowing of mentation which can be interpreted as premature aging or as a depressive reaction. More clear-cut, severe hypothyroidism with myxedema often leads to psychotic reactions. A case of this sort, diagnosed as paranoid schizophrenia was recently referred to Colorado Psychopathic Hospital by a competent internist. Psychiatrically she did show some of the characteristics of schizophrenia. However, a careful mental status evaluation, along with careful history, physical and laboratory studies confirmed our initial impression of myxedema. She has now continued to exist normally without psychological or physiological difficulties on 2 gr. of thyroid a day for over three years. Asher 10 has reviewed this subject under the captivating title of "Myxoedematous Madness." Emotional disturbances in endocrinological disorders such as Addison's disease and Cushing's disease are also to be noted. Psychic manifestation from ACTH and cortisone administration are a recent outgrowth of advances in hormone therapy, and should be included in any discussion of endocrinological and metabolic disorders.

The aim of this discussion is not to tell you how to be psychiatrists doing psychotherapy, but to give you some useful information to help you in your efforts to deal with emotional problems in your patients, problems which for various reasons cannot be referred elsewhere. The initial interview or interviews should be approached with one basic principl in mind: Let the patient talk — listen to him, give him time and attention without interruption. So often the patient initially fears to tell us the problem for which he really comes. Our questions may only serve to cloud the situation further and make it more difficult for him. In obtaining a history a simple "anything else" may aid us in our search much more effectively than, "Now tell me, why did you really come in," or "That is all very interesting, but what is the real trouble?" True listening, allowing the patient to set his own pace takes time, but time saved at the expense of a correct diagnosis is not saved at all. When personal matters are brought up, the doctor can then productively inquire into them. The patient should be allowed to set the pace, and will seldom be offended by your further inquires into areas he has already opened up.

When and if it does appear that emotional difficulties are an important part of the current problems it is useful to reassure the patient that you are capable of understanding him. A good initial interview then, should give us a clear picture of the emotional aspects of the difficulty, and also some idea about the patient's ability to deal with this. In short, we will have a fair idea of whether we can help him with his emotional difficulties, should we wish to try.

Assuming following the initial contact, we have decided the emotional aspect of the difficulty is treatable, and that we ourselves are going to attempt to help the patient with it, the ability to listen to the patient remains paramount. Continue to allow the patient to bring up subjects spontaneously, but reserve the freedom to ask further about any subject the patient does initiate. Do not be afraid of periods of silence, and generally allow the patient to break them. This emphasizes the responsibility of the patient in the process and may give him time to get up his courage to talk about some of his difficulties disturbing him most deeply. The doctor attempts to establish an uncritical, accepting atmosphere in which the patient gradually becomes able to see connections for himself, without fear of criticism for being the way he is. This accepting atmosphere does not mean the physician is entirely passive. Quite the contrary - he must constantly be on the alert to pick up the patient's feelings and help the patient become aware of these. This not only strengthens the doctor's helping relationship with the patient, but even more important, it allows the patient to examine further his disturbed emotions.

Interpretations have their place, but in the type of brief help outlined here, they are to be used only sparingly. Interpretations of feelings coming when you believe the patient understands can be most valuable.

In the process of helping the patient two special problems must be considered: advice, and information. Advising the person about specific ways of solving life's problems is seldom useful to him. Simply, if he were capable of accepting the advice, he probably would already have solved the problem in the logical way previously. If you give it, he may actually accept your advice and carry it out in a way to prove you wrong, saying:

"I did it the way you told me, and look, what are **you** going to do now?" Obviously the patient is more dependent on you and has not acquired any new skills in handling his problem maturely. On the other hand, information may be quite valuable. For example, factual information to an adolescent about masturbation may reduce many of his guilt feelings and allow improvement in general functioning by the attendant relief of anxiety. One should always search for the reasons behind the request for information. If these reasons appear irrational or neurotic they should be explored with the patient.

After improvement has been obtained, the problem of how to terminate the helping relationship must be faced. We frequently underestimate how much the relationship has meant to the patient and forget that terminating it may be a great blow to him. Thus, when our goal of relief of symptoms for which treatment was started seems to be reached, it is well to bring up termination, preferably when the patient himself has shown he is also thinking about it. Usually he will bring this up indirectly by mentioning how much better he is, or by seeming to have little in the way of problems to talk about. It is well then to make some simple remark like: "You're wondering how much longer we will need to continue." He may agree and then between you a few final interviews can be arranged. If he denies the suggestion, and you now believe he is ready for termination, it will be necessary to talk with him about his fears of not seeing you any more — essentially his fears of loss of your support. In any event several terminating interviews should be set in order to give you a chance to work with his fears about "going it" on his own. Never forget that the relationship has meant much to the patient and that terminating will have some element of abandonment to him. This feeling of rejection should be watched for and talked about as a normal reaction to terminating any close relationship.

There are many technical problems involved which we cannot go into. Frequency and length of interviews, however, should be mentioned. I would suggest one-hour periods weekly. However, one-half or three-quarter hour periods may be more feasible and can be quite helpful. Longer intervals than one week between visits can reasonably be used.

The whole process can be quite flexible, keeping in mind the major principles outlined. For example, some cases can never be entirely terminated. The patient receives continual help by knowing you are there and that he can see you if only once a year or so.

This brings us finally to the problem of handling psychological problems one may not be equipped to treat or alleviate. This is a particularly acute problem when dealing with psychotic persons. Recognizing a seriously ill psychotic as such may present difficulties. Often, again, listening to the patient's complaints may clear up the matter readily. Worthwhile remembering is that schizophrenics early in their illness, may have numerous somatic complaints, the eccentricity of which is not apparent unless we listen carefully. Unnecessary surgery for these complaints — hardly an acceptable form of psychosurgery - can thus be avoided. Depressive reactions should be watched for continuously, because: 1) they may be hidden under numerous bogus somatic complaints; 2) there is a constant danger of suicide; 3) psychiatric therapy — including electroshock therapy — can usually adequately and rapidly improve the symptomatology. These patients should definitely be referred if at all possible.

Referring neurotic patients when you have studied and are firmly convinced they have non-organic complaints, or at least complaints needing intensive psychiatric care, requires both tact and time. Yet on you, as the referring physician, depends much of the success of the future psychiatric treatment. A good referral makes our problem as psychotherapists, much easier. A poor referral may leave us with a hostile, resentful, resistive, essentially untreatable patient. The basis of a good referral is laid down during the initial interviews. The atmosphere should be permissive and the patient encouraged to talk about his problems, physical and emotional. This can be facilitated by supportive remarks by the physician. After an adequate history, and physical, laboratory tests should be done if indicated. Always, however, the patient should understand you have an open mind about his condition and are not trying to prove gallbladder disease, cardiac disease or the like. It is wise never to give in to the patient's demands for tests you believe un-

(Continued on Page 138)

the V & G Shop

Lingerie - Accessories - Gifts Sportswear

Potter's

Quality

Footwear

Huron

South Dakota

It's a pleasure to shop

at

Berg Style
Shop

Huron, S. D.

Welcome to Huron

Hedblom

the clothier

333 Dakota Ave.

Huron, S. D.

Hotel Tams

Huron, South Dakota



HEALTH EDUCATION: THE DOCTOR AS A TEACHER

William W. Bolton, M.D. Chicago, Illinois

One might think, on first examination, that this topic is "old stuff," something that has been gone over and over so many times that it resembles the lost hunter who, following his own tracks in the snow, finds the crowd ahead of him getting bigger and bigger, until he can't see the trail for the footprints.

The doctor is frequently referred to as a teacher, and his role as a friendly, helpful advisor to all the members of his community is well known to everyone through books and other popular literature. Certain aspects of this teacher role merit examination at this time because of the many changes that have occurred in community living, in the social life of our people, and, as an inevitable consequence, in the relationships of physicians and their patients.

In earlier times, the physician was the fountainhead of all knowledge about body functions and health. He was an educator perhaps principally because there was simply nobody else who had even the slightest idea about these important aspects of daily living. Through his wise counsel and professional guidance, some of the rudiments of healthful living were imparted to those at the more intellectual level in the community, including the various officials who had the responsibility of protecting the public against general disease and pestilence. Without question, many of the important first steps in development of community sanitation, disease con-

(Talk delivered before meeting of South Dakota Medical Society at annual meeting, 16 June 1953, in Rapid City, South Dakota.) trol and food purification were initiated by the early teacher. Of course the activities of your national organization in this connection since 1847 are well known to all.

An interesting bit of comment that will emphasize somewhat more strongly what I mean by the AMA interest is the following quotation from a "Report of the Committee on Medical Education," made at the 1868 annual convention of the Association:

"We are all aware of the fact that upon the subjects of life and organization, of health and disease, the scientific methods of prevention and the principles of cure — and especially upon the character and relations of the medical profession — the general community, embracing even literary men and the members of the other learned profession, if not profoundly ignorant, are possessed of the most crude and erroneous notions."

Today, the teacher role has been changed. The earlier teacher who labored virtually alone in many regions, and who found opportunities to teach at every turn, now has a great deal of competition, some of it well trained and entirely commendable, and some, unfortunately, poorly informed and at the same time extremely vocal, not to say blatant. The doctor-teacher of today cannot pontificate and get away with it. In fact, on numerous occasions he is placed somewhat on the defensive when patients come to him for comments on the latest "miracle" that has been reported in an enthusiastic press release, a dramatic popular-magazine article, or an equally uninhibited radio or television news

report. There are even occasions when the family physician, hemmed in by a heavy routine of office hours, home calls, and hospital rounds that afford him little relaxation, to say nothing of time for reading technical reports, is literally amazed by accounts that are brought to him by eager patients who want to begin treatment at once with some new-found panacea. That the report, dredged up by some sharp-eyed so-called science writer, is on a preliminary study of perhaps ten or fifteen patients and has been properly qualified by the original author appears to make little difference to the science writer and, perforce, to the lay reader. If half of the cases have shown some improvement, that is enough to set off a whole string of glowing promises that such and such a disease now faces imminent extinction.

Many times, the physician has difficulty in rationalizing the situation for his patients, and he even runs the risk of being considered an old mossback who is trying to stand in the way of medical progress, at least the lay interpretation of progress. To be perfectly frank and admit that the matter is new to him is to lose "face" unless he has long-term professional standing and the complete faith of his patients.

Faced with this new competition, what is the physician to do? Experience has shown that merely to adopt a generally negative attitude and pooh-pooh these premature reports is not enough. But how can the physician counteract them adequately? Of course he cannot turn lecturer or writer on a large scale if he is to continue to do justice to the many professional demands mentioned earlier. To complicate the problem, the public is now deeply interested in science and health, whereas in the earlier, more easy-going times such interest was sufficiently lukewarm to permit physicians to keep up with it, and perhaps even a little ahead of it.

Fortunately, there are some bright sides to the matter. As a result of the selfsame new stepped-up tempo of community life, local and state medical societies are now operating at a much higher level. Virtually all have highly efficient special committees ready and willing to come to grips with local health problems that might in earlier times have been shrugged off as not being closely enough related to the physician's basic interests. Through such committees, a great deal of excellent health education can be provided. This, it might be added, is often done effectively by indirection, sometimes by careful guidance of lay health group activities.

There are even, in many local societies, special speakers' committees or bureaus that can provide well-qualified physicians when these are requested by lay groups such as service clubs, women's clubs, church meetings, PTA assemblies, and many other public gatherings. It is encouraging to note that physicians who undertake these duties have learned to talk in sufficiently non-technical language. But the important point is that here we have a united front, with many working at the same task so there is no onerous burden placed on just one. It is an exemplification of the old adage that "in union there is strength." Through such cooperative effort the profession can get across many important messages, and provide health education that, by its basic simplicity and clarity, serves to teach the public to skip over the puffed-up headlines, the sensational opening paragraphs, and go to the end of the story, where the general disclaimer has been tucked away in a line or two conceding that what has been described in experimental or a preliminary report.

Another important improvement in the operation of virtually all state medical societies and a considerable number of big-city societies has been the recquisition of welltrained, highly-efficient lay secretaries—well exemplified by your very capable John Foster - who fill a need that went too long unrecognized and unacknowledged. Now all agree it is an obvious fact no physician secretary of any large "local" has, in the great majority of instances, the time to conduct a medical society's affairs as they should be conducted — especially its relations with other groups in the community - and retain either his practice or his sanity. Modern times demand modern methods, and the profession has profited greatly in recognizing this demand and meeting it properly. I believe it not an overstatement to say that this action has been literally life-saving in some instances, so far as continuation of the medical society as a significant factor in community affairs is concerned.

Your headquarters organization has not lagged behind, I believe you will agree. All

are well aware of the aggressive action that has been taken and still is being taken in many important matters relating to the national economy as well as the aims of the profession. I can assure you that such action will continue unabeted. At the same time, various offices at headquarters are working closer than ever before with state and local medical societies. An outstanding example is the PR service now being provided. Through this, societies are kept alerted to beneficial procedures that can be incorporated into their own activities. Another helpful service is the clip-sheet issued each week to newspapers, magazines, radio and television stations. Through the example of these restrained, factual reports on medical news, at least some debunking of sensationalism is being accomplished. Another very important service is represented in the weekly Secretary's Letter that goes to all societies over Dr. Lull's signature.

Once I was going over these headquarters activities that have just been discussed with a friend and he said to me: "What has this to do with health education?" It is not health education as such, of course, but it has a great deal to do with it, I am sure you will agree. One of the greatest obstacles to effective health education is indifference or the tendency of so many people to accept advertising blurbs or fantastic stories in general magazines about "cures" that so often turn out to be the wildest sort of pipe dreams. What must be done before proper health education can be provided is education of the public about the best source. This is accomplished by acquainting people with the agency that speaks with authority, so they will learn to turn more or less automatically to it for what they know will be accurate information.

Under the wise and foresighted direction of Dr. Bauer the Bureau of Health Education has also kept step with the new problems of how to provide the public with health information. Dr. Bauer, who was a pioneer in the presentation of health lessons by radio, was one of the first in the country to develop the idea of putting health messages on records that could be distributed everywhere for use by local radio stations. This service has now reached extensive proportions. For example, last year 787 sets of these recordings or "platters," each set containing thirteen 15-minute

programs, were distributed and used throughout the nation, with virtually every state having at least some coverage.

To break this down at your own state level. according to data in our office, the District Medical Society, in Sioux Falls, is currently borrowing recordings from the Bureau, as is the University of South Dakota in Vermillion. There would appear to be some good opportunities for other county societies as well as some auxiliaries. When you consider that each recording tells the listener it is the A.M.A. and the local medical society that is making this public service contribution, you can appreciate the important relationship that is being developed and sustained. These recordings are universally welcomed by radio stations and the public alike because they are professional jobs without dull, uninteresting monologues that would be likely to drive away listeners. Variety in the presentations adds to their appeal, some being dramatic, others with generous amounts of music, still others containing sprightly interviews.

Again, with the coming of television, Dr. Bauer was in the forefront. Some of the first television health education programs in the country were presented by him over station WBKB. Not only is this being continued, on occasion even with nation-wide hookups, but in addition Dr. Bauer has prepared a series of 12 television programs that can be used by local medical societies where facilities are available. These come complete with film strip for orientation and detailed recommendations concerning visual material that should be employed.

Another activity of the Bureau, one that is having important repercussions at many local levels, is the development by Dr. Bauer of a positive school health program. As a result of conferences called by him in 1947, 1949, and again in 1951, many of the misunderstandings and disagreements that previous existed over the place of the physician in school health programs have disappeared. I know that this action by Dr. Bauer has resulted already in significant changes in attitudes of many school officials who formerly were indifferent or perhaps actively opposed to the idea of cooperation with local medical societies on this vital matter. I am sure that this favorable change will continue, and I also feel sure that the move has been welcomed by

local mdical societies because it has strengthened their position greatly. A fourth school health conference is to be held in Highland Park this fall, and we are very happy to know that your new President, Dr. Mayer, plans to attend this with Mr. Foster. I am sure they will find much of interest to bring back to you for application at state and local levels.

What we consider an important service to the physician in connection with the health education he is expected to provide in his community consists of special packets of material that can be used in the preparation of lay talks. This service should be differentiated from the package library service of the library department. That is technical literature that serves as a professional refresher, whereas the items provided by the Bureau of Health Education are all written in non-scientific language. Thus, they lend themselves readily to incorporation into a lay talk, and will help the physician to avoid being too "highbrow."

We come now to what I consider the most important go-between of the medical profession and the public . . . TODAY'S HEALTH, the lay magazine published by the A.M.A. As you know, Dr. Bauer is Editor of this monthly periodical. Important as it was in its earlier days, I feel that it has grown greatly in stature since he took over its direction. New life has been injected into it, instructive special features have been introduced, and a great deal of attention has been given to improving its attractiveness through the use of special layouts, general art work, and "human interest" covers. Dr. Bauer has received numerous letters of commendation from physicians and these always mention the important health education services of the magazine. I sometimes wonder whether physicians in general appreciate what a significant contribution the publication is in terms of not only health education but-what is of almost as much importance --- as a public relations medium. It is unnecessary to point out that Today's Health is unique among the many publications of this type in that it is published by the profession's national organization, and therefore is unquestionably on the doctor's side. But it is not simply a promotion type of material. The good will it engenders among lay readers is the result of diplomatic suggestions of discussions that are completely fair and without bias. There is a possibility that some physicians may tend automatically to classify Today's Health with similar health magazines and conclude that it is a competitor rather than a friend. Careful inspection of a copy will serve to dispell such erroneous conclusions, I am sure. We believe that one of the best procedures physicians could adopt would be to make copies of TODAY'S HEALTH available in their office waiting rooms, lying there as an important ally that works while the patient waits — and works always in the interest of the doctor.

An especially important feature of TO-DAY'S HEALTH circulation program is the providing each month of special set of questions for discussion by health education classes in high schools, or perhaps even at the eighth grade level. This is considered a significant aid to the teacher, and is promoted with the knowledge that unless proper concepts of health practices are installed no later than the high school age there may be lost forever any opportunity to change the thinking of these future adults and parents. In many states, the Medical Society Auxiliary has been a faithful and enthusiastic factor in promotion of TODAY'S HEALTH subscriptions. The circulation department is concentrating at this time on the idea of having Auxiliary members provide at least a minimum of one subscription for display in each physician's office . . . and of course there is no objection to having an additional subscription for the home, as well as getting friends interested in our magazine. In your state of South Dakota, a truly remarkable job is being done by your Auxiliary, the 267 members having obtained a total of 293 subscriptions to TODAY'S HEALTH in 1952, representing 110 percent of the accepted goal of one for each member. This is all the more commendable because it is almost a 100 percent increase over the total reached in 1951, and is nearly four times the number obtained in 1950.

Also, for the first time, an Auxiliary group in South Dakota, the eighth district, has won a prize in the annual national contest. With a membership of only 27, that district turned in a total of 137 subscriptions.

It may be of interest to compare activities in your state with those in adjoining ones. In Montana, a total of 65 subscriptions were obtained, or 36 percent; in Iowa, the total was 260, or 30 percent; in Minnesota, 686, representing 36 percent; in Nebraska, 222, or 45 percent; in North Dakota, 138, or 60 percent; and in Wyoming, 165 — 110 percent.

An interesting procedure that might well be considered by others of your membership is being followed by a physician in South Dakota, who gives subscriptions to TODAY'S HEALTH to each of his obstetric patients. He has been doing this for several years.

Still another way in which the B.H.E. "backs up" the health education services provided by local physicians is through the distribution of a wide variety of printed material on health subjects that are more or less constantly of general interest and about which serious misconceptions may develop if the facts are not provided. To mention only a few, we have literature on heart disease, eye disorders and glasses, epilepsy, kidney disorders, rheumatic fever, arthritis, cancer, nutrition, pregnancy, and communicable disease. A special mailing of material that provides important orientation for teachers responsible for health education courses is a significant item in our daily activities.

Whenever possible, the B.H.E. provides onthe-spot cooperation with local physicians and their societies by filling speaking engagements, taking part in local health conferences, and addressing local lay groups. Every time one of the members of the B.H.E. staff visits an area for some specific purpose, the state and local medical societies are informed in advance and advised that all possible cooperation will be provided in connection with local activities. Of course, the service provided by Dr. Tom Hull's bureau of Exhibits is made use of extensively when "health weeks" or similar community projects are being developed. Again, it is a matter of reinforcing the health education activities of local physicians.

With this rather limited survey that I have been able to present, I hope it has been possible to demonstrate that the physician, now as always a teacher, is still able to function effectively in his community in spite of the changing times and customs, and has at hand helpful services that can strengthen and extend that function.

Something NEW is Cooking



MORE INSURANCE NOW AVAILABLE





SPECIFIC BENEFITS ALSO FOR LOSS OF SIGHT. LIMB OR LIMBS FROM ACCIDENTAL INJURY

> \$4,000,000 Assets \$20,000,000 Claims Paid 52 Years Old

Physicians Casualty & Health Ass'ns.
Omaha 2, Nebraska

CARPETING LIVING ROOM

Fullerton's

BEDROOM BEDDING

the Home of Good Furniture Central South Dakota's Oldest and Largest

Service Shoe Shop

Presents

the Following National Line of Known Shoes for Women

Rhythm Step

Red Cross

Naturalizers

Pennants

Town - Country

Westport

Service Shoe Shop MODERN SHOE AND HOUSERY RETAILERS

Experts in Corset Fitting

AIRWAY SURGICAL SUPPORTS

IDENTICAL BUST FORMS FOR

AFTER SURGERY REPLACEMENT

Fleming's Foundations
give the utmost in
Style and Comfort
at a Thrifty Price



Huron, S. D.

Osborn's

Men's Wear Boy's Wear

Huron

South Dakota

YOUR INVITATION

To The 73rd Annual Meeting

of the

SOUTH DAKOTA STATE MEDICAL ASSOCIATION

May 16-17-18

Marvin Hughitt Hotel

Huron, South Dakota

Business Sessions

Council — May 15th & 17th

House of Delegates - May 15th & 16th

Luncheons

3 on May 17th

3 on May 18th

Scientific Sessions

Surgical - May 17th

Medical — May 18th

Banquet

In the Marvin Hughitt

on May 17th

Stag Smoker

Sunday - May 16th

at the Country Club

Auxiliary Activities

Every day

MAKE YOUR RESERVATIONS NOW!

Don't Delay

Use the insert card to hang on your door telling your patients why your office is closed.

THE PROGRAM

- "Cardiovascular Surgery" E. H. Fells, M.D., Chicago
- "Cardiac Arrest" E. H. Fell, M.D., Chicago
- "Urologic Diagnosis in General Practice" C. D. Creevy, M.D., Minneapolis
- "Pediatric Surgery" John L. Keeley, M.D., Chicago
- "Lung Cancer as Seen by the Endoscopist" J. B. Gregg, Jr., M.D., Iowa City
- "Early Recognition and Treatment of Hip Disorders in Infants & Children" Carroll B. Larson, M.D., Iowa City
- "Hip Disorders in Adults with Reference to Diagnosis and Treatment" Carroll B. Larson, M.D., Iowa City
- "Differential Diagnosis and Treatment of Benign Lesions of the Lower Esophagus" W. E. Adams, M.D., Chicago
- "Hypertension" Arthur Grollman, M.D., Dallas
- "Use and Abuse of Drug Therapy" Arthur Grollman, M.D., Dallas
- "Practical Aspects of Anticoagulant Therapy" Franklin A. Kyser, M.D., Chicago
- "Multiple Myeloma" Lester E. Wold, M.D., Fargo
- "Handling of Accident Cases" Ralph C. Moore, M.D. & Charles Marsh, M.D., Omaha
- "The Management of Diabetic Coma" F. R. Keating, M.D., Rochester
- "Modern Aid for Clinical Evaluation of Thyroid Function" F. R. Keating, M.D., Rochester

JOHN B. GREGG, M.D.



Physicians throughout South Dakota and surrounding areas mourn the passing of Dr. John B. Gregg, 65, Sioux Falls, who passed away Wednesday March 3rd of a heart attack.

Dr. Gregg, an eye, ear, nose and throat specialist, was one of Sioux Falls' oldest physicians in point of service. His offices were in the Security National Bank building.

Funeral services were held at 11 a.m. Friday at Calvary Cathedral Church, the Very Rev. Francis J. Pryor III officiating. Interment will be in Woodlawn Cemetery.

Dr. Gregg was born at Gladbrook, Ia., Sept. 28, 1888. He received his bachelor of arts and doctor of medicine degrees at the University of Iowa in 1915 and the master of science degree there in 1916. Elida Bailey became his wife on Aug. 10, 1921. They had five children.

Decorated by King

From 1915 to 1917 Dr. Gregg was senior clinical assistant in otolaryngology at the University of Iowa. During World War I he was a major in the U. S. Army Medical Reserve Corps, assigned to the British Royal Army Medical Corps. The King of England personally decorated him with the British Military Cross for conspicuous gallantry and devotion to duty.

Following the war, he returned to the University of Iowa where he was an associate professor of otolaryngology for a year before starting his own private practice in Sioux Falls in 1920.

Dr. Gregg was a fellow in the American College of Surgeons, a member of the American Medical Assn., South Dakota State Medical Society, American Academy of Opthalmology and Otolaryngology, American Laryngological, Rhinological and Otological Society, Newcomen Society of England, Alpha Omega Alpha, Sigma Xi, Phi Rho Sigma, and was a consultant to the U. S. Veterans Bureau.

Locally, he was a member of El Riad Shrine, Elks Club, Rotary Club, American Legion, Minnehaha Country Club, Minnehaha Lodge No. 5, A.F. & A.M., Sioux Falls Consistory, A. & A.S.R., and was a member and president of the school board for many years.

Survivors

Survivors include the widow, two sons, John B., Iowa City, Ia., and Charles B., Sioux Falls, three daughters, Mrs. Mary O. Conied, Edgewood, Md.; Mrs. Margaret G. Coontz, Forest Hills, N. Y., and Elizabeth A. Gregg, Washington, D. C.; seven grandchildren; two brothers, Roy M., Dell Rapids and Dan, Long Beach, Calif.; four sisters, Mrs. George Bruskill, Murdo; Mrs. Lela Hall, Seattle; and Mrs. Leslie Hendrickson, St. Onge, and Mrs. Florence Hoese, Los Angeles. One sister preceded him in death.



The climax of my term as President of the South Dakota State Medical Association comes next month with the annual session. I an looking forward to a good attendance, since Huron is conveniently located for the majority of our members.

Aided by the invaluable assistance and suggestions of numerous individuals, the Program Committee has come up with an outstanding array of speakers, so the scientific sessions should make it worthwhile for you to attend the meeting. I am making a special appeal to all of our members to attend all of the scientific sessions and give courteous attention to each and everyone of our speakers. Good attendance



at the early and late periods is particularly requested, since nothing is so discouraging to a speaker as trying to make a good talk before vacant chairs. Our guest speakers sacrificed much time and effort to be with us, often coming great distances in order to bring us new ideas and technics.

The social events planned by our hosts, the members of the Huron District Medical Society, will no doubt furnish us with many hours of enjoyment, and the technical exhibits are always interesting and instructive. Don't forget that the Women's Auxiliary has planned a delightful program for the entertainment of the ladies, so bring your wives along.

The business sessions are of supreme importance. I hope that all officers and committees will get their reports turned in to our Executive Secretary, John C. Foster, promptly so that they can be printed in the handbook. Then sufficient time can be allotted for their study and intelligent discussion of controversial questions will result in well considered decisions.

R. G. Mayer, M.D.



THE LITTLE HOOVER COMMISSION REPORT

Provision was made by the 1953 State Legislature for a "Little Hoover Commission" to study the executive branch of state government and to make recommendations for its reorganization for the purpose of improving its economy and efficiency. The consultant firm of Griffenhagen and Associates was hired to make this study and a report on the study has recently been released.

Of special interest to physicians is the proposal to create a Department of Occupational Registration which would assume the administrative functions of all boards which now license the various professions and occupations. There are now 15 independent examining boards including those in medicine and in the basic sciences. The various examining boards would be retained in an advisory capacity, continuing to exercise such functions as approving the issuance suspension, or revocation of licenses; adopting rules, regulations, and standards governing their respective professions; and conducting hearings on charges, complaints, violations, and related matters.

The proposed Department of Occupational Registration would be headed by a commissioner appointed by the governor for a term of four years. Functioning under the commissioner would be the divisions of records, examinations, and investigations. The division of records would process applications, maintain registers, and handle general office routine. The division of examinations would conduct the examinations for the affiliated boards. The division of investigations would conduct investigations and inspections in-

cident to law enforcement and gather facts for use of the boards in approving, suspending, or revoking licenses.

The advantages claimed for the proposed plan are elimination of the necessity for each existing board to furnish its own secretarial help, office equipment, etc., and the provision for unification, standardization, coordination, and continuity of performance of administrative functions common to all boards. A small financial saving is also claimed.

Another recommendation in the Griffenhagen report proposes the formation of a Department of Health and Welfare. The functions of this Department would include all those now assigned to the present Department of Health and the Welfare Department. In addition there would be assigned all sanitation inspections of hotel, restaurants, dairy and food products, etc., now under jurisdiction of the Department of Agriculture. There would further be added the administrative responsibility for the operation of the Yankton State Hospital, and Redfield School for the Feeble Minded, the State Sanatorium, the Soldiers Home, the State Penitentiary and the State Training School.

It is proposed that the department be headed by a commissioner appointed by the governor with consent of the senate for a four year term. A proposed board of health and welfare would consist of five members appointed by the governor for overlapping terms of five years. The organization would include a division of health, a division of welfare, and a division of administration. Heads of the divisions and heads of the various institutions would be appointed by the commissioner with the consent of the board.

The 1955 legislature will undoubtedly give considerable attention to the report of the Little Hover Commission. Because of the direct impact on the medical profession of the above proposals, all physicians should give them careful study in order that they may be able to express their opinions to the members of the legislature.

G.J.V.H.

COUNCIL MEETING

Marvin Hughitt Hotel, Huron, Jan. 31, 1954

The meeting was called to order at 1:20 p.m. by the Council Chairman, Robert E. VanDemark, M.D. Present were: Doctors Mayer, Spiry, Cottam, Jernstrom, Peeke, Brown, McCarthy, Stoltz, Morrissey, Buchanan, Skogmo, Davidson, Reding, Lampert, VanDemark, VanHeuvelen, Hard, Ranney and executive secretary Foster.

Dr. Stoltz moved that the reading of the minutes of the last meeting be dispensed with because they had been published in the Journal. Seconded by Spiry and carried.

A discussion was held on the study of the senile problem by the Legislative Research Council. No action taken.

Dr. Morrissey, chairman of a special committee of the Council to study expenses of committee members when traveling on Association business, read the report of the committee as follows:

To supplement the report given to the Council at the September meeting. If one standing committee were allowed an expense account, all standing committees and probably all special committees should be allowed the same privilege. If this were done, we would find it difficult to estimate the possible expense to the State Medical Association. We do recognize, however, that the type of investigation which certain committees are called upon to make might cause unusual expense at times to the committee members.

It is therefore recommended that each standing committee submit an expense budget for consideration of the House of Delegates. With such information available that body could determine whether such expense could be handled under existing income.

It is also recommended that a membership

poll be taken to determine the state-wide attitude toward paying expenses of members involved in State Association business. Dr. Buchanan moved that the recommendation be accepted. Motion seconded by Dr. Reding and carried.

Mr. Foster discussed the group life insurance plan for Association members. No action taken.

A request from the American Medical Association to Dr. Brown requesting that he serve on an Internship Committee was discussed. Dr. Buchanan moved that the Council urge Dr. Brown to accept the appointment. Motion seconded by Dr. Cottam and carried.

A discussion was held on the formation of an American Legion-Medical Association joint committee on V.A. medical programs. Dr. McCarthy moved that the Committee on Veterans Administration & Military Affairs plus the Association president and executive secretary, act as a liason committee with the American Legion. Motion seconded by Dr. Stoltz and carried. It was suggested that the Committee prepare a Resolution to the American Medical Association on the South Dakota State Medical Association's position on AMA-VA policy.

After a discussion on the establishment of annual awards to the radio station and newspaper doing outstanding work in the field of health, Dr. Davidson moved that two awards be granted, one to the outstanding newspaper and one to the commercial radio station, plus a savings bond in the amount of \$50.00 to the individuals reponsible for the outstanding work. Seconded by Dr. Spiry and carried.

Dr. Reding moved that each of the specialty groups in the State be asked to recommend a speaker in their field for the Annual Meeting program. Motion seconded by Dr. Davidson and carried.

An editorial proposed by the chairman of the Grievance Committee for the Journal was read and discussed. Dr. Skogmo moved that the Council favor the purpose of the editorial in that it tends to publicize the existance of the Committee in South Dakota but that it would be well for the entire committee to revise and approve such an editorial. Motion seconded by Dr. Davidson and carried.

Dr. Stoltz then moved that the Grievance Committee be instructed to consider a new title for the committee and make recommendations to the House of Delegates at their May meeting. Motion seconded by Dr. Davidson and carried.

Several matters concerning legislation were discussed by the Council at length. Dr. Mayer moved that the Committee on Workman's Compensation be instructed to check into the possibility of raising weekly compensation and medical-hospital limits and report to the House of Delegates in May with definite plans. Motion seconded by Dr. McCarthy and carried.

After discussion on the physio-therapy bill, Dr. Stoltz moved that the Council approve the principle of the law. Seconded by Dr. Buchanan and carried.

A discussion was also held on naturopaths and on osteopaths in hospitals. No action taken.

A recommendation requesting support for a bill from optical companies to restrict the sale of ready made glasses without a specialist examination was discussed. Dr. Mayer moved that the matter be referred to the Academy of Ophthalmology and Otolaryngology for study. Motion seconded by Dr. Jernstrom and carried.

Several subjects recommended to the Council by the South Dakota Academy of Ophthalmology and Otolaryngology for study and action with the objective of securing appropriate regulatory legislation were discussed. Proposal \$1 concerned elimination of "subtitle" advertising by physicians, such as professional cards in newspapers, etc. Dr. Mayer moved that this proposal be referred back to the Academy for further study and reconsideration. Seconded by Dr. Stoltz and carried.

Dr. Buchanan moved that proposal \$2 — prohibition of advertising of prices by physicians—should be pointed out to the Academy that this was already covered by existing laws. Seconded by Dr. Reding and carried. Dr. Stoltz moved that the Academy present specific recommendations for Proposal \$3 — regulatory legislation for Orthoptists or Orthoptic Technicians — and present the Council with such recommendations. Seconded by Dr. Davidson and carried.

A discussion was held on changes in the autopsy law. Dr. Mayer moved a study of the current law be made and changes recommended. Motion seconded by Dr. Stoltz and

carried.

Dr. Mayer moved that the long term study on maternal mortality in the State of South Dakota by the South Dakota Ob-Gyn Society be approved by the Council. Seconded by Dr. Reding and carried.

A discussion on M.D. insignias in scotch tape for member's automobiles was held. Dr. Mayer moved that the Association order 1000 and make an initial distribution to all members of the Association. Additional insignias could be obtained by the physicians through the Association office at a minimal cost. Motion seconded by Dr. Peeke and carried.

Dr. Mayer moved that a study be started on a state wide indigent fee schedule and that information be gathered from surrounding states. Motion seconded by Dr. Spiry and carried.

A discussion was held on the Study of Federal Grants to the states but no action was taken.

Dr. Brown moved that the resolution by the Colorado Medical Association on automobile safety be referred to the proper committee of the House of Delegates. Motion seconded by Dr. Buchanan and carried.

A request from the South Dakota League for Nursing asking financial support was read by Mr. Foster. Dr. Jernstrom moved that if this was in addition to the yearly contribution made to the South Dakota Nurses Association, that each group be given \$50.00. Motion seconded by Dr. Reding and carried.

After a discussion on the approval of a fee schedule for the Division of Vocational Rehabilitation, Dr. Mayer moved that the present VA fee schedule be endorsed for the Division of Vocational Rehabilitation. Motion seconded by Dr. Davidson and carried.

Dr. Jernstrom moved that the South Dakota State Medical Association again edorse the A.A.P.A. Essay Contest and that state prizes of \$50.00, \$25.00 and \$15.00 be given. Motion seconded by Dr. Stoltz and carried.

A discussion was held on the complete reporting on insurable diseases for insurance companies but no action was taken.

Dr. Morrissey moved that the Committee on Maternal and Child Welfare study the certificates for still-births and make suggestions. Motion seconded by Dr. Brown and carried.

Dr. Mayer moved that the Council give Dr.

VanHeuvelen a vote of thanks for assistance and advice during the state legislature. Motion seconded by Dr. McCarthy and carried.

Dr. Peeke moved that the Committee on Nursing Training be requested to investigate LPN training and report back to the Council. They should be informed of the need for LPN's in rural hospitals. Motion seconded by Dr. Brown and carried.

Dr. Jernstrom moved that the duties of the Insurance Committee be enlarged to include all phases of health insurance problems and to report to the Council on any recommendations that may develop. Seconded by Lampert and carried.

Dr. VanDemark moved that Dr. A. F. Grove of Dell Rapids be named an Honorary Member of the State Association. Motion seconded by Dr. Stoltz and carried.

Meeting adjourned at 5:00 p.m.

MINUTES

Medical School Affairs Committee Meeting Marvin Hughitt Hotel, Huron February 24, 1954

The meeting was called to order at 6:30 p.m. Those present were: Drs. VanDemark, Mayer, McVay, Price, Hard and executive secretary Foster.

A discussion was held on the recommendations of survey on higher education as conducted by Griffenhagen and associates for the Legislative Research Council in the field of medical education.

The attached recommendations were made by the committee:

Recommendations to President Weeks, U.S.D. From the Medical School Affairs Committee of the South Dakota State Medical Association Research Recommendation "A"

"The extremely high per student cost of operating the school of medicine should be reduced. This can be done by increasing the number of students and not the staff, by assigning work in other parts of the college to the medical professors, or by reducing the number of salaries of the medical staff."

Medical School Affairs Committee Recommendation on above.

The State Medical Society has rightfully concerned itself with the problems in medical education in the State of South Dakota

and have shown particularly active regard in this matter during the past ten years. This organization passed a resolution in 1947 to the effect that in view of the limited population and resources of the state, it did not seem feasible at that time to expand our medical education facilities to the full four-year program. This resolution further contained the provision that the state should direct its efforts to the development and maintenance of the best possible basic science school. Since the date of the resolution, the State Society has taken a very active role in implementing the provisions of this resolution. A standing Committee, a Medical School Affairs Committee, has periodically received reports on the developments of the University School of Medicine and has made recommendations to its administrative officer and faculty with the purpose of improving the status of medical education in the state.

The Medical School Affairs Committee has noted newspaper reports of the recommendations of Griffenhagen and associates and has undertaken its own survey of some of the matters referred to in the report offered by that organization.

The Committee views with alarm the recommendations which would presume to reduce the cost of operating the School of Medicine. First, the figure of \$2,100 per medical student per year is one of the lowest in the country as based on operating budgets. Of seven basic science institutions. four have operating budgets very nearly double the budget of the medical school. Still, the number of medical students educated therein are not significantly higher than at South Dakota. Secondly, a strictly comparable school to South Dakota is the Medical School of North Dakota which presently is operating on a budget one-third above the present budget for the South Dakota Medical School.

This Committee views with absolute alarm any suggestions to reduce the staff of salaries as such action would immediately jeopardize the present efficiency in the teaching program at the Medical School. Further, any action of such major importance would very likely mean non-accreditation for the medical school. Were this to transpire it is freely predicted that it would

be the end of medical education in the state for other medical schools would not accept our medical students for transfer for the completion of their work.

This Committee has reviewed salary schedules of a total of some forty other medical schools in the country. It is to be noted that there is on the average a difference of \$1,000 for each teaching rank between the salaries paid at the University of South Dakota and the median level at some forty other schools. It is self-evident that salary adjustments must be made in a upward direction if a qualified staff is to be maintained

There is a suggestion in the report of Griffenhagen and associates that medical education in terms of cost as well as in regard salaries paid staff is being compared with other schools within the state and that this has completely ignored the established fact that the medical school of South Dakota must be compared with other medical schools in attempting to assay any costs involved.

It is inconceivable to the committee that any recommendation to reduce costs to improve teaching can accomplish its purpose.

Research Recommendations "B & C"

"Nursing education should be transferred from the State College to the school of medicine at the University. The Division of pharmacy of State College should be transferred to the school of medicine of the University."

Medical School Affairs Committee Recommendation on above.

In relation to the nursing and pharmacy education program and the medical school, it seems logical that the qualified scientific staff at the University of South Dakota could enhance these programs considerably.

Research Recommendation "D"

"The State Health Laboratory, in the school of medicine at the University, exists only in law and not in fact. Its functions have been assumed by a division of laboratories in the department of health that is located at Pierre. The law providing for the state health laboratory should be repealed and the agency abolished unless the health department transfers its laboratory back to the University."

Medical School Affairs Committee Recommendation on above.

The Committee feels that qualified personnel and excellent facilities now at the University of South Dakota School of Medicine can not be utilized to the maximum and for the best interest of the medical profession and the public unless designation is made of the facilities as a State Health Laboratory.

THE MEDICAL BOOKSHELF

Dr. James P. Steele, radiologist of Sacred Heart Hospital at Yankton contributes the following review of:

The Chest; a Handbook of Roentgen Diagnosis by L. G. Rigler. Yearbook, 1954. 2d. ed.

This second edition contains additional illustrations and some additional text in line with newer diagnostic procedures and concepts which have come into use over the last few years. An excellent reference book, useful to the general practioner and should be on the bookshelf of all those who have an x-ray machine and take chest films. Provides a quick and accurate index of all the more commonly

seen diseases and processes. Simply and precisely written.

Essays on the Applied Physiology of the Nose by A. W. Proetz. Annals, 1953. 2d. ed.

Unique in its integration of physiology and rhinology; valuable for its historical information and providing a fundamental understanding of function and structure; practical in its chapter on nasal treatment and surgery. Recommended for any medical bookshelf.

Growth and Development of Children by E. H. Watson and G. H. Lowrey. Yearbook, 1951.

Valuable reference for graduate students

and practioners for dealing with clinical problems of children. A guide for determing normal atonomic physiologic and behavioral development from birth to maturity. Includes environmental and heredity factors, fetal growth, physical measurements, prematurity, organ and osscous development, role of endocrine glands, energy metabolism, nutrition in normal growth, abnormal growth. Charts on growth and development.

Stedman's Medical Dictionary. Williamson and Wilkins, 1953. 18th ed.

The editors remark in the preface "To the creation of medical words there is no end." Also, there is no end to the need for omitting outmoded and obsolete words and of correcting older definitions in the light of newly acquired knowledge. Authors have successfully accomplished this task. Contains discussion of medical etymology; has flexable cover, thumb index; words are easy to find; because of size print is small. Recommended for any medical bookshelf.

The Traffic in Narcotics by H. J. Auslinger and W. F. Tompkins. Funk and Wagnalls, 1953.

Addressed to the general public; lawmaker; enforcement officers; physicians; pharmacists; social workers; educators; scientists; and those connected with international cooperation. Particularly for the medical profession is the chapter on narcotics and modern medical science describing clinical investigation, chemistry and pharmacology of opium alkaloids, appraisal and value of new opiates, and the guarding against addiction and the control of drug addicts.

Vesalius. World, 1950.

During the dedication of the medical building at the University of South Dakota a valuable edition of the Vesalius masterpiece, De Humani Corpis Fabrica owned by the medical school, will be on display. In the library collecton is an inexpensive book (less than \$10.00) on the illustrations of the works of Andreas Vesalius with annotations and translations; a discussion of the plates and their backgrounds; authorship and influence; and a biographical sketch of Vesalius. This book is bound in orange red with Vesalius in gold letters on the cover. It has good quality paper, excellent reproductions and clear print. Well worth owning.

> Mrs. Esther Howard Medical Librarian University of South Dakota

THE MONTH IN WASHINGTON

Just about a year ago the Hill-Burton hospital construction program was under heavy attack in the House Appropriations Committee. But the damage was not permanent. The program has made a complete recovery. More than that, Congress shows every intention of doubling the appropriation for the program, but earmarking the additional money for grants to diagnostic and treatment centers, rehabilitation facilities, hospitals for the chronically ill, and nursing homes. At this stage the legislation to stimulate health facility construction is believed to be closer to enactment than any other major health project of the Eisenhower administration. Although the main objectives have not been altered, some significant changes were made in the bill by the House Interstate and Foreign Commerce Committee in two weeks of intensive work at closed-door sessions. Then, in mid-March, the Senate committee took up the bill and considered additional amendments.

Most changes are designed to tighten up eligibility for grants. For example, money could go to only two types of diagnostic or treatment centers, those operated by and for a governmental unit or by a group that also operates a nonprofit hospital. Nor would centers or nursing homes be eligible unless under medical supervision or operated by an association that also operates a hospital.

Another change written into the bill would rule out a project if it were not to be open for full and unrestricted use by the general public. Thus labor union, fraternal, and prepayment health plans could not benefit if they offered their own subscribers any advantage in service at the center or hospital.

On the financial side, several amendments have been tentatively adopted. One would allow states to use the original Hill-Burton formula for apportioning money among projects, or to accept a flat 50% federal contribution. (As in the original Hill-Burton act, the poorer states would be allocated more per capita.) States would be allowed to pool their allocations for construction of interstate facilities, and the United States would be authorized to recover its proportionate share of a project if at any time the project were converted to profit use of were transferred to interests which for any other reason would not be eligible.

Of major interest to the medical profession, although not far along on its legislative course, is the administration's proposal for subsidizing prepaid health plans for federal civilian employees. The U. S. would pay a maximum of \$26 per year, to be matched by the employee, for the purchase of any type of prepaid insurance. Any cost above \$52 per year would have to be borne entirely by the employee.

As a part of the program, the administration is proposing that payroll deductions be authorized, a concession the insurance and prepayment insurance organizations have been urging for years. Currently federal executives differ on whether payroll deductions would be "legal," but none is willing to risk authorizing deductions in the absence of specific approval from Congress.

Still following a slow and controversial course is the administration's proposal for reinsurance of health plans. Early in the session — with the ardent support of Chairman Charles S. Wolverton of the key House committee — this legislation appeared pointed toward enactment. However, the Department of Health, Education, and Welfare was not satisfied with Mr. Wolverton's bill and decided to draft one of its own. The drafting consumed many weeks—time that may prove fatal with a Congress hoping to adjourn early for the fall elections.

The Defense Department, made uncomfortable by a few suspected subversive physicians and dentists it doesn't quite know what to do with, is asking for an amendment to the Doctor Draft act. The department's problem is this: The most recent Court of Appeals decision holds that physicians or dentists drafted or called up from the reserves must, under the Doctor Draft act, either be commissioned or discharged. So, technically, a man who refuses to fill out his loyalty questionnaire would be rewarded by a release. To correct the situation, the Department is asking that the law be changed to allow it to withhold a commission from a loyalty suspect, yet keep him on duty for the specified time in noncommissioned status and assigned to professional duties.

The American Medical Association is continuing its support of Senator Bricker and others who are convinced they still can enact a resolution calling for an emendment to restrict international agreements. The Association's position is that unless a safeguard is written into the Constitution, future international agreements could impose on the country social and medical care programs that Congress itself would not approve.

ATTENTION

"Excellent opportunity for man out of internship to gain broad experience with specialist backing. Our group needs a man on a one or two year basis at \$1,000 per month. Write Box 11, S. D. Journal of Medicine, 300 First National Bank Bldg., Sioux Falls, S. D.

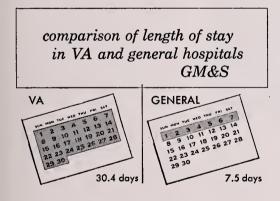
In Viewing the VA Medical Program . . .

average length of stay in VA hospital

	Average (days)	World War II (days)	Warld War I & Other (days)
 тв	205.8	203.6	210.2
NP	178.3	89.2	430.6
GMS	30.8	23.5	42.5

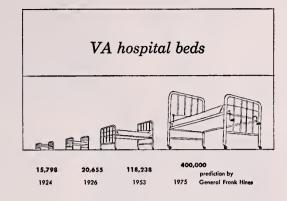
The average length af stay in VA hospitals far Warld War I veterans is cansiderably greater than far World War II veterans, which now camprise 76% af the tatal veteran papulatian. The greatest pressure is yet to be exerted an VA haspitals as Warld War II veterans grow alder and require increased medical care for disabilities unrelated ta military service.

In Viewing the VA Medical Program . . .



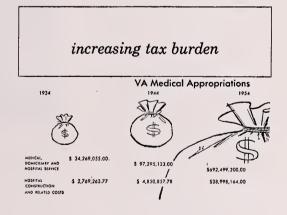
General medical and surgical patients in VA hospitals are confined faur times langer than in non-federal hospitals. VA hospitals admit patients for examination, diagnosis, and treatment, much of which is narmally undertoken outside civilian haspitals. Also, VA patients aften remain haspitalized throughout the entire medical treatment period, whereas non-VA potients are usually treated at hame during their canvalescence. This is a major factor in the tremendous cast of the VA medical program.

In Viewing the VA Medical Program . . .



Farmer VA Administratar Frank Hines estimated that by 1975 under existing VA medical legislatian, appraximately 400,000 hospital beds will be needed. Yet medical authorities are convinced the VA cannot attract sufficient medical personnel to staff more than 120,000 beds. The VA naw maintains three times the number of beds needed for treatment of service-cannected cases.

In Viewing the VA Medical Program . . .



In twenty years, the cast of the VA medical program to U. S. taxpayers has increased 1,875%. Yet only 15% of the patients treated in VA haspitals are veterans with disabilities incurred while in uniform. The VA medical pragram is now second in size and expense only to the nation-wide system of socialized medicine in Great Britain.



This is your MEDICAL ASSOCIATION



ANTICOAGULANTS KYSER SUBJECT

"The Practical Aspects of Anticoagulant Therapy" has been selected as the title of a paper to be presented at the Annual Meeting, May 18th by Doctor Franklin A. Kyser of Chicago.

Dr. Kyser is a graduate of Northwestern University and spent three years as a Fellow at the Mayo Clinic. He has been on the faculty at Northwestern since 1942 and is now Assistant Professor of Medicine. He specializes in cardio-vascular disease and is editor of "Therapeutics in Internal Medicine."

INTERNIST KEATING ON PROGRAM

F. Raymond Keating, Jr., M.D., of the Mayo Clinic at Rochester, Minn. has been scheduled to speak on the Annual Meeting Program in Huron, on May 18th. Doctor Keating's subjects will be

"The Management of Diabetic Coma in Modern Age for the Clinic Evaluation of Thyroid Function."

Doctor Keating received his A.B. degree at Cornell, his M.D. at Cornell and his M.S. in Medicine from the Mayo Foundation, the graduate school of the University of Minnesota. He interned at Philadelphia General Hospital and then was a Fellow in Medicine at the Mayo



Clinic, which he followed by taking a position as research assistant at the Massachussetts General Hospital. He is a consultant in medicine at the Mayo Clinic and Professor of Medicine at the Mayo Foundation for Medical Education and Research of the University of Minnesota. He is a Fellow in the American College of Physicians, belongs to the American Socity for Clinical Investigation, American Diabetes Association. American Goiter Association and others.

SDSMA MEN TRAVEL TO RURAL CONFERENCE

Two representatives of the South Dakota State Medical Association, A. P. Peeke, M.D., Volga, and Executive-Secretary John C. Foster, attended the ninth annual Rural Health Conference in Dallas, Texas, March 4-6.

The program, which covered a wide variety of rural health problems, was especially interesting because more time at both morning and afternoon sessions was devoted to qustions and answers from the floor and to panel discussions.

From these hours of discussion one point became crystal clear: the medical profession and farm leaders now possess a unity of purpose and performance in stimulating rural people to attain a fuller and more healthful life.

Several speakers stressed the fact that medicine is no longer a job for the doctor alone — it's a problem for the community. In fact, the health of the community as the speakers pointed out, is part of the duty of the community itself.

Dr. George F. Lull, Chicago, secretary and general manager of the American Medical Association, said in opening the meeting:

"Public health facilities must be extended to cover all areas so that there will be universal protection against communicable diseases, protection of food, milk and water supplies, elimination of disease-bearing insects, and adequate invironmental sanitation. The American Medical Association, built on a record of public service over a period of 107 years, is interested in all of these problems and their solutions. Any help which you rural health people can extend in doing the job will be most appreciated."

MEDICAL TECHNOLOGISTS WILL MEET

The 22nd annual National Convention of the American Society of Medical Technologists will be held at Miami Beach, Florida, June 13-17, 1954. The co-head-quarters Hotels are the Delano and DiLido.

MEDICAL LIBRARY ASS'N. TO MEET

The Medical Library Association will hold its Fifty-third Annual Meeting June 15-18, 1954, in Washington, D. C. The headquarters will be the Hotel Statler, and the official host the Armed Forces Medical Library.

The program will include a discussion on medical research by embassy attaches, tours of the National Institutes of Health, the National Naval Medical Center, and of the Armed Forces Medical Library. Delegates to the Meeting will hear addresses by Dr. Detlev Bronk, President to the Rockefeller In-

stitute of Medical Research, Lt. Col. Frank B. Rogers, Director of the Armed Forces Medical Library, Mr. Verner Clapp, the Acting Librarian of Congress, and Dr. Raymond Zwemer, Chief of the Library of Congress' Science Division.

Further information can be obtained from Lt. Col. Frank B. Rogers, Armed Forces Medical Library, 7th Street and Independence Avenue, S. W., Washington 25, D. C.

SOUTH DAKOTANS ATTEND VA MEET

Seven representatives of the S.D.S.S.A. attended the regional conference on VA Medical Care in Omaha, Sunday, February 28th. The one day meeting which was scheduled to determine the views of the doctors in the area on the handling of VA medical cases was presided over by Dr. Louie M. Orr of the AMA's Council on Medical Service.

The largest delegation from outside the state of Nebraska was the seven man delegation from the SDSMA which included president, R. G. Mayer, M.D., Aberdeen president-elect A. W. Spiry, M.D., Mobridge; A. A. Lampert, M.D., councillor and alternate AMA delegate, Rapid City; L. C. Askwig, M.D., Pierre, chairman of the Committee on Veterans Administration and Military Affairs; Don H. Manning, M.D., member of the committee on VA and Mil. Add., Sioux Falls: B. R. Skogmo, M.D., Mitchell, councillor; and John C. Foster. Sioux Falls, executive secretary of the Association.

NEWS NOTES

Dr. John J. Stransky has rejoined the Brown Clinic staff in Watertown after a period of military service.

The V.A. Hospital at Hot Springs is looking for a pathologist, a roentgenologist, three internists and two surgeons. Anyone interested should contact the manager. General practitioners interested in internal medicine would be acceptable.

ABERDEEN HEARS DR. JAMES JOHNSON

The Aberdeen District Medical Society met in Aberdeen, March 10th to hear Dr. James Johnson of the Nicollet Clinic, Minneapolis, speak on "Bleeding of the Gastro Intestinal Tract, It's Cause and Treatment"

In addition to Johnson's talk, Dr. Charles Kelly of Aberdeen held an informal discussion on the work of Alcoholics Anonymous.

DP DOCTORS GET VA O.K.

South Dakota physicians on a displaced persons status may supply medical service to war veterans under a ruling obtained by Senator Karl Mundt.

Mundt sought out the Veterans Administration after getting word from John C. Foster, secretary of the South Dakota Medical Association, that a situation existed which curtailed medical service to some veterans.

Foster said regulations prohibited medical care to VA beneficiaries by physicians who were not U. S. citizens. He noted that in South Da-

kota 25 displaced persons physicians were practicing in various localities that are considered emergency medical areas.

Mundt asked clarification of the law from Harvey V. Highley, veterans administrator Highley replied that contracts as fee basis physicians may be awarded to non-citizens as individuals under authority of Public Law 346.

I.C.S. TO MEET IN SAO PAULO

The International College of Surgeons will hold its Ninth Biennial Congress in Sao Paulo, Brazil, April 26 to May 2, in conjunction with the celebration of the Fourth Centennial of that city, at the official invitation of His Excellency Professor Dr. Lucas Nogueira Garcez, Governor of the State of Sao Paulo. Funds for the Congress were contributed by the Sao Paulo Government.

DR. CLYDE DAWE YANKTON SPEAKER

The Yankton District Medical Society met at Sacred Heart Hospital March 24, 1954 for dinner, scientific program and business.

Dr. Clyde Dawe presented a very interesting program on the "Cytology of Malignant Lymphomas." Dr. Dawe is from Department Surgical Pathology, Mayo Clinic.

The business meeting was called to order by the President **Dr. Livingston.** The minutes of February 3, 1954 meeting were read and approved.

Mr. John Foster informed the society about the state meeting to be held May 16, 17, 18th at Huron.

The President announced that the next regular meeting would be held in Vermillion, May 13, 1954.

Meeting was adjourned at 9:15 p.m.

DR. W. E. ADAMS TO SPEAK ON SURGERY

Dr. W. E. Adams, Professor of Surgery, University of Chicago, will speak on the



Annual Meeting program of the Medical Association, May 17th. His subject will be "Differential Diagnosis and Treatment of Benign Lesions of the Lower Esophagus."

Dr. Adams received his M.D. at the University of Iowa and took postgraduate appointments at Iowa, Chicago, and Berlin. He is James Nelson and Anna Louise Raymond Professor of Surgery at the U. of Chicago and Director of Thoracic Surgery at the U. of Chicago Clinics. He is the author of surgical chapters in three text books and over

an officer in the Chicago T.B. Society, Chicago Pathological Society, Chicago Surgical Society, American Association for Thoracic Surgery, and the American Board of Thoracic Surgery.

DR. C. B. LARSON TO SPEAK ON HIP ILLS

Dr. Carroll B. Larson, Iowa City, will present two papers on hip disorders at the An-, nual Meeting of the South Dakota State Medical Association in Huron, May 17th.



His first paper will take hip disorders in children and the other in adults.

Dr. Larson is a native of Council Bluffs, educated at the University of Iowa. His graduate training in orthopedcis was received at Harvard and Massachusetts General Hospital. He is presently Professor and Chairman of the Department of Orthopedics was received at Har-Iowa and a member of the editorial board of the Journal of Bone and Joint Surgery.



Whenever You Are In Sioux Falls

Be Sure and Visit Our New Store . .



Complete Line of Equipment, Supplies and Drugs

KREISER'S Inc.

21st & Minn.

Sioux Falls, S. D.



ANIMAL HEALTH PHARMACY* PART II

Kenneth Redman, Ph.D.**

Methods of injury by insects — Insect injury may be considered under three categories for our purposes: (1) destruction or damage to crops, (2) annoyance and injury to man and other animals, and (3) destruction of possessions and store products. Some of the injuries and destruction done by insects have now become quite well known by the public, but it must be remembered that it is only through a continuing educational program that man's fight against insects can be successful. By virtue of his training and daily contact with the public, the pharmacist is in a unique position to serve in such a program.

Insects damage or destroy crops in many ways. Grasshoppers, armyworms, Colorado potato beetles, and pear slugs are common examples of insects that consume crop and other plants by eating plant parts by chewing. Such insects are referred to as chewing insects. In the past two years, for example, armyworms have denuded trees and other vegetation in parts of Minnesota in spite of vigorous efforts to control them. The United States Department of Agriculture has estimated that nearly twenty million dollars worth of crops were destroyed by grasshoppers in the United States in 1950, while at the same time about twenty-five million dollars worth of crops were saved from grasshoppers by proper control measures.

Another cause of extensive crop damage, as well as injury to domestic animals and man, is the piercing-sucking group of insects. Plant bugs, leafhoppers, harlequin cabbage bugs, mosqutoes, scale insects, and aphids are examples of common insects with a slender, sharp-pointed beak for piercing and sucking either plant juices or the blood of animals, as the case may be. All of the insects just mentioned, with the exception of mosquitoes, pierce plants and suck their juices. However, in addition to sucking plant juices or blood, many of the insects also introduce toxins, bacteria, etc. into the tissues of both plants and animals. In the case of plants, although the net result in loss may be the same as that from chewing insects, the appearance of the plant may be greatly different. Often plant leaves turn yellow or brown, become spotted, curl or wilt, and the plant may die or at least be greatly reduced in vigor and productivity.

Still other insects cause crop damage by boring or tunneling into plants, thus weakening the plant and also subjecting it to bacterial or fumgus diseases. The "borers," such as the flathead, peach tree, and European corn borers, cotton boll weevils, and gall insects are examples of this type of injurious insect. In addition to our farm crops, "borers" and other insects also do great damage to our forests. Some fifteen million feet of ponderosa pine was reported destroyed by the Black Hills beetle alone in South Dakota in 1947. No attempt has been made to estimate all crop losses, but some idea may be had from the estimated losses in the United States of

^{*}The second of a series of articles concerning the role of the pharmacist in the field of animal health.

^{**}Professor and Head of the Department of Pharmacognosy, Division of Pharmacy, South Dakota State College.

about eighty-five million dollars caused by the European corn borer in 1950.

Insects that annoy and injure man and other animals do so in a variety of ways, as we have seen in the case of plants. Since the health problems of man are generally given special consideration, injury and losses caused by insects to domestic animals will be stressed here, however. Insects causing losses and injury to domestic animals may be considered as parasites and are divided into two general classes: (1) internal and (2) external parasites. Both the internal and external parasites are represented by chewing and piercing-sucking insects. In addition, some of the external parasites are venomous, such as spiders, ticks, centipedes, black flies, stable flies, bedbugs, fleas, bees, ants, and blister beetles. It is estimated by the U.S.D.A. that the average annual loss for the period 1940-1944 to livestock, poultry and eggs caused by cattle grubs, horn flies, stable flies and other flies, lice, ticks, mites and fleas was nearly 400 million dollars. More recently the U.S.D.A. has estimated that "livestock pests each year cost this country about 500 million dollars, mostly in wasted feeds, lower production of meat and milk, and damaged hides." On the other hand an estimated annual savings of only about 100 million dollars for the 1940-44 period was made by treating these domestic animals for insect pests.

To the extent that the pharmacist carries crude vegetable or animal drugs and food products, either for the fountain or the animal health department, he should be directly interested in and aware of the destruction of store products by insects. Of the crude drugs, the dried roots, barks and seeds are most likely to be attacked by insects; Rhubarb, Ginger, Nutmeg, White Pine, Sarsaparilla, Slippery Elm, Glycyrrhiza, Almonds, Nux

Vomica, Dried Yeast, and Cantharides are particularly subject to insect attack. The corn meal moth is the greatest offender if proper steps are not taken against it. The tobacco beetle should be guarded against in the tobacco department. In spite of our food and drugs laws requiring that our food be free from insect contamination, it has been estimated that meal and flour moths and other insects cause an annual loss to packaged and processed foods in this country exceeding 150 million dollars.

The pharmacist, too, should be particularly interested in insect damage to such possessions as clothing, furniture, rugs and books. Termites, powder post beetles, silverfish, clothes moths, and carpet beetles are particular offenders and it behooves the pharmacist to not only protect his own possessions from such insect attack, but to advise and help others also. The annual loss in this country to clothing, furniture, rugs and other possessions is variously estimated from 200 million to 500 million dollars.

The figures quoted above are for losses in the United States for fewer than one hundred of six hundred or more known injurious insects in North America, and as pointed out by Haeussler, (Yearbook of Agriculture 1952), they "emphasize that everyone is affected in many ways by many insects" even though we might not realize it for months at a time. Obviously no one knows the annual loss caused by all insects in the United States, but Haeussler now reports an estimate of at least four billion dollars for an average year. Even in these days of astronomical figures, four billion dollars should be a sufficiently large amount to cause us all to pause and consider, while the pharmacist should be acutely aware of the problem of injury and losses by insects.

(To be continued)



RECENT PHARMACEUTICAL SPECIALTIES

Amphedase Kapseals

What it is

Amphedase is a Parke Davis anorectic and antidepressant. It is supplied in bottles of 100 and 500 Kapseals. Each Kapseal contains:

d-Amphetamine Sulfate	2.5	mg.
Nicotinamide	25	mg.
Thiamine Hydrochloride	5	mg.
Ascorbic Acid	50	mg.
Taka-Diastase	300	mg.

What it does

Amphedase lessens mental depression, aids in supplementing vitamin intake often reduced in depression, and supports normal digestion often disturbed in depression or chronic alcoholism.

What it's for

Amphedase is helpful in managing patients with obesity, asthemia, chronic alcoholism, or depression.

How it's used

Ahphedase dosage of 1 Kapseal should be given initially as a test dose. Response of the patient will be a guide to further dosage. With adjustments as indicated by test dose, average dosage in obesity is 1 Kapseal 30 minutes before morning and noon meals and at 4:00 p.m., daily; in convalescence, 1 Kapseal after mealtime and no more than 1 Kapseal (to avoid wakefulness) after the evening meal; in asthenia, 1 Kapseal after mealtime; in alcoholism, depression, faulty nutrition, and when indicated in geriatric patients, 1 or 2 Kapseals after mealtime, except in the obese. Amphedase is contraindicted in patients hypersensitive to

ephedrine-like compounds, in those showing anxiety or undue excitability, and in those with cardia or coronary disease not able to tolerate vasoconstrictors. It should be used with caution in patients with hypertension.

Penasoid Suspension

What it is

Penasoid Suspension (crystalline penicillin-G oral suspension, Parke-Davis) is a stable suspension of potassium penicillin in cocanut oil for oral use. It is a palatable, creamy preparation with butterscotch flavor. It does not require refrigeration. Penasoid Suspension is supplied in 60-cc. bottles, 60,000 units of crystalline penicillin-G per cc. (300,000 units per 5-cc. teaspoonful).

What it does

Penasoid Suspension provides the convenience of liquid oral penicillin in an effective form having a lower incidence of hypersensitivity reactions. Its pleasant butterscotch flavor increases its acceptance by children.

What it's for

Penasoid Suspension is indicated for treating most patients with diseases caused by penicillin-sensitive organisms. It is especially adapted for treating children. It is not indicated in syphilis, actinomycosis, subacute bacterial endocarditis, meningitis, or in other diseases demanding high, prolonged penicillin blood levels.

How it's used

Penasoid Suspension dosage should be adjusted by the physician to the severity of the patient's infection. An average is 1 tea-

spoonful (300,000 units) three to four times daily. Occasionally 2 to 3 teaspoonfuls (600,000 to 900,000 units) three to four times daily may be needed. It should be prescribed as supplied and is best absorbed when taken on an empty stomach one to two hours before or two to three hours after meals. If no response in 48 hours, start parenteral penicillin.

New Form of Aureomycin for Small Animals and Calves

A new form of Aureomycin chlortetracycline that can be administered orally to small animals and to calves has been placed on the market by Lederle Laboratories.

The new product — Aureomycin Calcium Oral Drops — has proven itself, according to scientists at Lederle, to be highly effective in the treatment of calf scours and calf pneumonia in animals less than four weeks old. These two diseases cause the heaviest losses in calf crops in the average herd.

The new form of the broad-spectrum antibiotic is also indicated for use in the treatment of small animal infections such as respiratory infections, bacterial infections associated with distemper, and local infections, among others.

In calves of less than four weeks, in dogs and cats, oral dosage is based on the use of approximately 10 to 25 milligrams per pound of body weight per day.

The new product is being sold in 10cc. vials with dropper.

Products Recently Accepted by the A.M.A. Council On Pharmacy and Chmistry Nalorphine Hydrochloride. — Nalline Hydrochlorine (Merck. — C₁₉H₂₁NO₃HC1.—M. W. 347.83.

Actions and Uses. — Nalorphine is a derivative of morphine and therefore subject to control under the Federal Narcotic Law. Its action, however, is considerd to be pharmacologic rather than chemical, because it exerts little or no analgesic effect and antagonizes such narcotic analgesics as morphine, emperidine, and methadone. Nalorphine promptly reverses the respiratory depression and increases both the minute volume and rate of respiration in patients narcotized by large doses of these compounds. It is not active against the depression produced by barbiturates, cyclopropane, or ethyl ether.

Nalorphine as the hydrochloride is useful

as an antidote in the treatment of accidental overdosage and to combat alarming symptoms of extreme narcosis produced by morphine, its analgesic derivatives, meperidine, and methadone. It is not useful as a cure or for the relief of narcotic addiction. The drug may be administered ten minutes prior to delivery of parturient women to overcome meperidine respiratory depression of the new born. Its use in excessively narcotized subjects should not exclude other appropriate supportive therapy. Until the effects of long-term use become known, or are found to be harmless, it should be used only for acute conditions.

Nalorphine hydrochloride appears to be relatively safe, although the lethal dose has not been established for man. Although doses up to 40 mg. per kilogram of body weight are tolerated by experimental animals, it is considered advisable to limit single does in man to not more than 40 mg. High dosage is usually accompanied by dysphoria, miosis, pseudoptosis, lethargy, mild drowsiness, and sweating. Occasionally nausea, heaviness in the limbs, and hot and cold flashes occur. Pallor, similar to that which accompanies intravenous injection of morphine, is sometimes observed. In morphine addicts, administration of the drug may be followed by typical abstinence changes, such as yawning, rhinorrhea, lacrimation, goose flesh, vomiting, and restlessness.

Dosage. — Nalorphine hydrochloride is administered as a solution by injection intravenously, intramuscularly, or subcutaneously, depending on the rapidity of action desired. Intravenously, the usual adult single dose is 5-10 mg., repeated in ten to fifteen minutes if adequate increase in pulmonary ventilation is not obtained. The effect of the drug lasts from two to three hours, and the total dosage to be given depends on the degree and duration of the depression. In severe cases of poisoning, doses as high as 40 mg. may be employed. Merck & Company, Inc., Rahway, N. J.

Solution Nalline Hydrochloride. 1- and 2-cc. ampuls. A solution containing 5 mg. of nalorphine hydrochloride in each cubic centimeter. Stablized with 0.2 per cent sodium bisulfite and buffered with 1.5 per cent sodium citrate.

Sodium Menadiol Diphosphate. — Synkayvite Sodium Diphosphate (Hoffmann-LaRoche).

 $-C_{11}H_8Na_4O_8P_26H_2O.-M.$ W. 530.22.—The hexahydrate of the tetrasodium salt of 2-methyl-1,4-naphthalenediol disphosphate.

Actions and Uses. — Sodium menadiol dihosphate, a dihydro derivative of menadione, has the same actions and uses as other analogs of vitamin K. Sodium menadiol diphosphate is water-soluble and therefore absorbed following oral administration without bile salts. It is also effective by parenteral administration.

Dosage. — Sodium menadiol diphosphate is administered orally and by injection subcutaneously, intramuscularly, or intravenously. On the basis of molecular weights, the dosage should be at least three times that of menadione to provide a theoretically equivalent amount of vitamin K activity. The calculated ratio is 3.1 mg. of sodium menadiol diphosphate to 1 mg. of menadione. For the management of prothrombin deficient hemorrhagic states, the average dose for adults should range from 3-6 mg. daily and may be administered orally or parenterally as the situation requires. Larger doses may be given if necessary. As an antidote for bishydroxycoumarin overdosage, a dose of 75 mg. intramuscularly, repeated as often as necessary, is recommended. For the prevention of hemorrhage associated with prothrombin deficiency caused by salicylates after tonsillectomy, a total daily dosage of 10-25 mg. (administered in three divided doses) is recommended. For the prevention of hemorrhagic disease of the newborn, either 6-12 mg. is administered parenterally to the mother during labor, or 3 mg. is given to the infant immediately after deliver. Hoffmann-LaRoche, Inc., Nutley, N. J.

Solution Synkayvite Sodium Diphosphate: 1-cc. ampuls.—An isotonic solution containing 5-10 mg. of sodium menadiol diphosphate in each cubic centimeter. 2-cc. ampuls. — An isotonic solution containing 37.5 mg. of sodium menadiol diphosphate in each cubic centimeter. Stabilized with sodium metabisulfite and preserved with 0.45 per cent phenol.

Tablets Synkayvite Sodium Diphosphate: 5 mg. U. S. patent 2,359,132. U. S. trademark 393,117.

Phenindine.—Hedulin (Walker).— $C_{15}H_{10}O_2$.—M. W. 222.23—2-Phenyl-1, 3-indandione.

Action and Uses.—Phenindione, a synthetic anticoagulant, is similar in action to bishydro-

xycoumarin and its derivatives but is chemically unrelated. It is effective orally for lowering of the blood concentration of thrombin in the management of conditions characterized or complicated by intravascular clotting. (See New and Nonofficial Remedies under the monographs on bishydroxycoumarin, cyclocumarol, and ethyl biscoumacetate.)

Phenindione acts more promptly than does bishydroxycoumarin and is effective in smaller doses. Therapeutic levels are usually obtained within eighteen to twenty-four hours following the institution of therapy. Cumulative effects have not been observed and the prothrombin time of the blood usually returns to normal within twenty-four to forty-eight hours after the drug is discontinued. As an anticoagulant the agent is thus considered to be relatively safe. However, the predictability and controllability of its effect is not considered superior to other short-acting oral anticoagulants.

As with all systemic anticoagulants, the drug should not be given to patients with a hemorrhagic tendency, such as hemophilia, thrombocytopenic purpura, and leukemia with pronounced bleeding tendency, or to patients with open wounds or ulcerations, particularly of the gastrointestinal tract.

Dosage. - Phenindione is administered orally. The initial total daily dosage should be 0.2-0.3 Gm., half given in the morning and half at bedtime. Patients weighing less than 70 Kg. should be given 0.2 Gm. daily; those weighing more than 70 Kg. should receive 0.3 Gm. daily. This usually does not result in excessive lowering of the blood prothrombin level, but subsequent dosage is subject to adjustment in accordance with prothrombin time determinations. Maintenance dosage should be adjusted to lengthen the prothrombin time from two to two and one-half of normal values. The maintenance dosage may vary from 0.05-0.1 Gm. per day, given in the same manner as the initial dose. The average maintenance dose is approximately 75 mg. When this has been established by daily prothrombin determinations for the first three days, the tests for prothrombin time need be repeated only at seven-fourteen day intervals, or as may be indicated by the patient's response. If hemorrhage occurs the drug should be immediately withdrawn and, when necessary, 50-75 mg. of vitamin K should be administered intravenously with or without transfusions of fresh whole blood or plasma.

Arsthinol.—Balarsen (Endo).—C₁₁H₁₄AsNO₃S₂.
—M. W. 347.27.—Cyclic 3-hydroxypropylene ester of 3-acetamido-4-hydroxydithiobenzenearsonous acid.—2-(3'-Acetamido-4'— hydroxyphenyl)-1, 3-dithia-2-arsacyclopentane-4-methanol.

Actions and Uses.—Arsthinol is a trivalent arsenical with indications somewhat similar to the pentavalent arsenicals previously available for oral use. Pentavalent arsenicals presumably are reduced to trivalent compounds in the body, and act in the latter form.

Arsthinol, when administered by mouth, has been demonstrated to be effective against intestinal amebiasis and yaws. There is no adequate evidence that the substance is effective against nonintestinal amebiasis, but it may be of value against other intestinal protozoa. However, the latter claims require further substantiation.

Dosage.—Arsthinol should be given in courses lasting five days. The daily oral dose is 10 mg. per kilogram of body weight, with a maximum of 500 mg. in twenty-four hours. Ordinarily the entire daily dose is taken following breakfast. Endo Products, Inc., Richmond Hill, N. Y.

Tablets Balarsen: 0.1 Gm.

Zincasate Burn Dressing—Zinax Burn Dressing (Hynson, Westcott & Dunning).—Zincasate burn dressing consists of zincasate gel, a partially hydrolyzed casein gel, and zincasate guaze, a zinc acetate impregnated gauze.

Actions and Uses.—Zincasate, a combination of partially hydrolyzed casein gel and zinc acetate impregnated gauze to be applied separately, is used as a dressing for the local treatment of burns by the closed pressure bandage technique. The gel, first applied over the injured area, is converted promptly into an insoluble coagulum at the point of contact with the zinc acetate impregnated gauze to form an adherent, protective, semipermeable membrane that permits the evaporation of water while reducing the loss of transudates. The gel will set eventually without the aid of zinc acetate gauze, so that the layer next to the wound is not immediately coagulated. The gauze, through its union with the adherent gel, provides some pressure and a surface to which an elastic bandage can be applied to increase pressure where this is feasible. The combined use of these materials should follow the same general principle and aseptic technique applicable to the use of petrolatum and plain gauze. The use of a coagulable protein and zinc acetate gauze has the slight advantage of convenience of application, avoidance of maceration, less need for redressing, and production of a pliable protective film permitting easier movement and transport of the patient.

Dosage.—Zincasate gel and gauze dressing are applied after removal of obvious dirt or necrotic tissue, with sterile technique but without surgical debridement. The casein gel should be applied to superficial as well as to more deeply injured areas to a thickness of not less than 1/8 in. (0.3 cm.) and should extend beyond the borders of such areas. This is then covered with strips of the zinc acetate impregnated gauze, over which a pressure bandage is applied. Alternatively, the gel may be applied to the gauze, which is then placed over the injured area with the gel side in opposition to the wound. In first degree burns or burns that exhibit only erythema the dressing is usually removed the following day. In superficial second degree burns, the dressing may be left intact until healing occurs. At that time the dressing will readily drop away from the wound. Earlier removal can be accomplished by soaking the dressing with warm isotonic sodium chloride solution. In deep second and third degree burns, where grafting may be necessary, the surface is frequently ready for grafting within nine to twelve days. In such cases it is advantageous to hasten removal of necrotic tissue by redressing once during this period. In severe burns, the gel film separates readily after the dead skin becomes lysed. It is not necessary to use occlusive bandages on the hands, arms, or face or in other areas where this is not feasible. Gauze is applied longitudinally to the extremities, rather than encircling the limb, to avoid abnormal constrictriction or pressure at vulnerable points. For small or facial burns, the gel and gauze may be applied as a patch without elastic bandage. Zinc Acetate.—C₄H₅O₄Zn.2H₂O.—M. W. 219.-50. Hynson, Westcott & Dunning, Inc., Baltimore, Md.

Zinax Burn Dressing: 8.18-cc. tubes of zin-

casate gel packaged with 10 gauze pads and 118.3-cc. cans of zincasate gel packaged with 2 yards of gauze. The gauze is impregnated with approximately 30 per cent zinc acetate by weight. U. S. patent 2,579,367.

Revision of N. N. R. Statement on Testes

In the customary annual reconsideration of the text of new Nonofficial Remedies it was pointed out to the Council that exaggerated and unwarranted claims are made for the use of these agents in the so-called male climacteric. In order to promote rational use and to establish reasonable limits to such claims the Council adopted the following paragraph to be inserted in the general statement on testes (N. N. R. 1952, p. 367):

"A spontaneous cessation of hormone release by the testes with aging has been recognized as a rare entity termed male climacteric or menopause. Symptoms are similar to those of the female menopause. In the vast majority of instances, the vague manifestations of a psychoneurosis are incorrectly confused with those of organic testicular disorder. Criteria for laboratory confirmation of the diagnosis of male climacteric are equally confused. At present, such diagnosis probably is not justified without the demonstration of castration levels of urinary gonadotropin, as in the female. Testosterone provides effective replacement therapy only in the true disorder."

The Council has hitherto accepted only preparations of testosterone propionate and methyl testosterone. As corollary to the preceding decision the Council voted also to consider preparations of free testosterone.

New Generic and Brand Names Recognized by the Council

Antihemophilic Plasma (Human) for a preparation of human plasma designed to preserve the antihemophilic globulin component.

New Dental X-ray Developer

A developer formulated specifically for dental x-ray film processing was announced by the Du Pont Company at the Greater Philadelphia Dental meeting, February 3-5.

Known as Du Pont Dental X-ray Developer, it is a liquid concentrate and is available in a new space-saving developer and fixer combination package called Du Pont Twinpack.

The Twinpack chemical package contains two 24-ounce bottles of concentrated liquid,

one of developer and one of fixer. One gallon of working solution may be made from the contents of each 24-ounce bottle.

Smaller and easier to handle than the familiar quart-size, the 24-ounce bottle of concentrated solution speeds mixing time considerably. For making quantities of less than one gallon, the bottle label is graduated in ounces. Three ounces of stock solution will make one pint (16 oz.) of working solution. Use of new chemical components permits greater concentration of the solutions. This means that Twinpack can be shipped by mail at a lower cost. Bottles of developer and fixer also may be obtained individually.

A folder describing the new Twinpack solutions is available from the Du Pont Photo Products Department Wilmington 98, Del.

Para-aminobenzoic Acid Sunscreen

Para-aminobenzoic acid is an excellent sunscreen. It is also less likely to cause sensitization than its esters. The following formula makes an elegant preparation:

p-aminobenzoic acid 4.5 distilled water 6.0 vanishing cream qs ad 30.0

Levigate the acid with distilled water and then incorporate into the hydrophilic ointment and vanishing cream.

Pyribenzamine Hydrochloride

Description

A new, green-colored, 25-mg., coated tablet of the proved antihistamine, Pyribenzamine hydrochloride. The tablet coating is sugar and is not designed to limit absorption to a specific area of the gastrointestinal tract or to delay absorption of the active medication.

Indications

To provide symptomatic relief in hay fever, sensitivity reactions, allergic rhinitis, urticaria and other allergic manifestations.

Advantages

The 25-mg. tablet is particularly suited to treatment of the pediatric patient who requires antihistamine therapy. The sugar coating effectively masks the bitter taste of the medication which increases acceptance of the product by younger patients. Physicians will also find the new low potency form convenient in treating adult patients who require less than the standard 50-mg. tablet per dose. Additional flexibility of dosage adjustment is also advantageous.

Packages and Prices

Bottles of 100 tablets - F.T.M. each \$2.55 List Price each \$1.70 Bottles of 1000 tablets - F.T.M. each \$21.90 List Price each \$14.60

Femandren Linguets

This new Ciba product is a combination of 0.02 mg, ethinvl estradiol (the most potent oral estrogen) and 5 mg. methyltestosterone U.S.P. (the most potent oral androgen) in Lin-

Advantages of Linguets

Absorbed directly into the bloodstream. Approximately twice as potent as the same

hormones when swallowed.

Virtually as potent as injected hormones.

More economical because of lower dosage.

Advantages of Femandren Therapy

Controls more menopausal symptoms than do estrogens alone.

Permits lower dosage of each hormone.

Withdrawal bleeding is less likely than with estrogens alone.

Minimizes androgenic side effects.

Has an anabolic, tissue-building action.

Gives a tonic sense of well-being.

Supplies two types of hormones normally present in both men and women.

Permits treatment of geriatric as well as menopausal patients.

Often reduces need for sedatives, by controlling symptoms with physiologic hormones.

Indicatons

Te relieve depression, hot flashes, nervousness, exhaustion and related symptoms common in menopausal and postmenopausal states; to relieve pain and retard bone rarefaction in osteoporosis; to improve mood, build tissue, and promote well-being in geriatric patients.

Mehod of Use

Linguets should be held in the buccal pouch or under the tongue until dissolved.

Dosage

Menopause—1/2 to 1 Femandren Linguet daily or every other day for 21 days of a 28day cycle. When symptoms are controlled, maintenance dosage should be established.

Osteoporosis—1 to 2 Femandren Linguets daily for 1 month. Many patients will need maintenance doses thereafter.

Postmenopausal and geriatric patients-1/2 to 1 Femandren Linguet daily or every other dav.

Supply

Green, scored Linguets containing 0.02 mg. ethinyl estradiol and 5 mg. methyltestosterone U.S.P. Bottles of 30 and 100.

Price

Bottles of 100 \$5.00 (List Price) \$7.50 (F.T.M.) Bottles of 30 \$2.00 (List Price) \$3.00 (F.T.M.)

'Marezine' Hydrochloride

Marezine hydrochloride, brand of Cyclizine hydrochloride, is a new drug indicated for the prevention and treatment of motion sickness, nausea and vomiting of pregnancy and the symptomatic relief of vertigo.

Cyclizine hydrochloride is one of several new piperazine salts synthesized in The Wellcome Research Laboratories, Tuckahoe, New York.

Dosage

For the prevention of motion sickness on prolonged trips the usual adult dosage of 'Marezine' is 50 mg. three times a day, before meals, as required. For short trips one tablet one half hour before departure is usually sufficient. For children 6 to 10 years one half of the adult dose is recommended. In vertigo 50 mg. three times a day is recommended for adults. For nausea and vomiting of pregnancy, 50 mg. three times daily. It is suggested that the morning dose be taken 15 to 20 minutes before arising.

Side Effects

From the outset it has been apparent that 'Marezine' is a drug with wide passengeracceptance due to the almost complete absence of unpleasant side effects. Major Chinn found the incidence of drowsiness, dry mouth, tinnitus, and headaches to be identical with the incidence of these symptoms in placebo treated patients.

Drowsiness was reported in only 4% of the 4,000 passengers treated on ships of the American Export Line. In the 93 Airline passengers given 'Marezine' on Capital Airlines planes, only one case of drowsiness was reported.

Preparations

Marezine' Hydrochloride brand of cyclizine HC1 is supplied as 50 mg. compressed, scored tablets in bottles of 100 and 1000.

DIVISION OF PHARMACY NEWS

Edward C. Staudenmier, Humboldt, S. D., a senior student in the Division of Pharmacy, was recently elected to membership in Phi Kappa Phi, National Honor Society. Membership in the State College Chapter of Phi Kappa Phi is limited to the upper 6% of the senior class.

Lt. Eugene Palmer (SDSC 1951) and Mrs. Palmer visited the Division of Pharmacy upon his recent return from Korea. Lt. Palmer will be separated from the service in the near future.

Irwin Maloney, SDSC 1932, Eli Lilly Medical representative, was recently transferred to the Maryville, California area. Mr. Maloney is well known to the pharmacists of South Dakota and especially to those of the Brookings, Mitchell and Black Hills areas where he has worked.

A combined meeting of the Student Branch of the American Pharmaceutical Association and Rho Chi Honorary Pharmaceutical Society was held March 10 in the Union ballroom. Mr. A. A. Anderson, Manager, Omaha District, Eli Lilly Co. spoke.

DRUG EXCHANGE DEPARTMENT

The practicing pharmacist is becoming more and more concerned about the tremendous increase in duplicate specialty drug products and the tie-up of capital which sometimes is involved when the physician discontinues writing for a product. Chan Shirley, Brookings, has submitted an idea aimed at helping move some of this "dead stock."

The drug exchange department will list those items on your shelves which you no longer use and would like to exchange. Pharmacists who have calls for any item listed can then render a helping hand by arranging to exchange or purchase the product.

Listings may be sent to H. S. Bailey, Box 675, College Station, S. Dak. any time up to the tenth of the month for publication in the Journal of the following month.

Shirley Drug, Brookings, S. D.

- 400 Lilly Pills #264 Cathartic Improved
- 600 Acetanilid, Caffeine and Soda Compd. #1 Sharpe and Dohme
 - 30 Declid Capsules
 - 50 Ertron Capsules
- 300 Pulvules Trisogel

EDUCATE TOMORROW'S PARENTS TODAY

National Social Hygiene Day, April 28, 1954 follows by a month the Fortieth Birthday of the American Social Hygiene Association, an organization with which our profession has been closely identified, especially through the Joint Committee of the American Pharmaceutical Association and the American Social Hygiene Association, for many years.

As a profession, we have had a particular interest in combatting the venereal diseases and have played our part in bringing about much of the success of VD control efforts. As a profession, we know VD is still an important public health problem. As pharmacists, thinking men and women, we know that real VD control must rely on educating each successive generation in the respect for self and for others that obviates sexual promiscuity — the root cause of VD.

Pharmacy is a profession but pharmacists are husbands and wives, parents and citizens of their communities. Consequently, we have both a concern for and a duty towards the personal happiness and development of the youth of our country and towards the strength and stability of family life. Many pharmacists are members of local hygiene societies and committees. They support programs of education for personal and family living for parents, teachers, youth leaders and religious leaders in their communities — all aimed at providing every child with maximum opportunities for emotional, moral, social and physical development.

Thus they play their part in educating tomorrow's parents **today**. They play a vital part in the continuing battle against VD, and against educational defects that often contribute to it, and against prostitution that is another contributing factor.

More and more pharmacists are needed in this medical-social-educational battle for the health and well-being of our nation. VD remains a major public health problem. The factors contributing to VD still exist. We can, if we will, use our organized strength and our own inner resources to promote social hygiene and the welfare of our country.

ANIMAL HEALTH SEMINAR

The First Annual Animal Health Pharmacy Seminar in Virginia with the patronage of the American Animal Health Pharmaceutical Association was held March 17-18, at the Roanoke Hotel, Roanoke, Va.

The program was both interesting and instructive. It attracted the attendance of many pharmacists engaged in Animal Health Service. Speakers on the program included Dr. Mark Welsh, director of veterinary public health at Lederle Laboratories; George Seville, district manager animal and plant health department, McKesson & Robbins; Dr. Henry Carpenter, director of laboratory, Globe Laboratories; Dr. J. O. Rowell, entomology department, Virgnia Polytechnic Institute; Dr. Wilson J. Bell, biology department, Virginia Polytechnic Institute.

The topics discussed during the seminar included the contribution of the pharmacist in the control of both large and small animal diseases and poultry diseases as well as parasite and insect control. Dr. C. L. Campbell, Secretary of the A.A.H.Ph.A., discussed the educational design of animal health pharmacy.

Plans for future Animal Health Pharmacy Seminars in Virginia were discussed.

NEW FAIR TRADE PAMPHLET

A new, 16-page pamphlet, entitled "How to Practice Fair Trade in the Marketplace," has just been published by the Bureau of Education on Fair Trade, according to Dr. John W. Dargavel, Bureau chairman and executive secretary of the National Association of Retail Druggists.

The pamphlet presents, in 24 questions and answers, the fundamentals involved in the practice of fair trade. It also includes sample fair trade contracts used by manufacturers in establishing both retail and wholesale minimum fair rade prices.

Fair trade "can work best only when manufacturers, wholesalers and retailers, who choose to operate under fair trade, do so in good faith," Dr. Dargavel writes in the foreword to the pamphlet. On the question of "why should a manufacturer enforce his fair trade price structure," the Bureau publication suggests that if a manufacturer "doesn't enforce, he stands to lose his fair trade structure by default. If he doesn't want to enforce,

he shouldn't go on fair trade."

The pamphlet is being distributed to national, state and local trade associations in all fair trade fields, to fair-trading manufacturers and wholesalers, to lawyers concerned with fair trade and to trade publications throughout the country. A limited quantity of the booklets will be made available by the Bureau without charge upon request.

The publication covers both specific and general questions, ranging from the requirements for making a fair trade contract and the steps involved in taking action to curb violators, to the issue of why fair trade prices should be enforced.

On the question, "It is necessary for a manufacturer to take legal action against all violators?" the Bureau pamphlet says:

"The manufacturer should be prepared to enforce on a broad front. Experience has remonstrated, however, that the problem can be most effectively met by taking action against the most flagrant offender or offenders in a given trading area. Success in curbing these generally results in adherence to fair trade prices throughout the area. If it does not, the manufacturer must continue to seek injunctions against other violators in the area, or face the possibility that the courts will dismiss the injunctions he has already obtained."

The Bureau of Education on Fair Trade is a non-profit organization, established under the auspices of the National Association of Retail Druggists with representation from all segments of the drug industry. Its purpose is to develop public understanding and support of fair trade as an instrument of state and national policy.

LILLY ENFORCES FAIR TRADE CONTRACTS

Two New Jersey drug stores have been permanently enjoined from selling the trademarked products of Eli Lilly and Company at below fair-trade minimum prices. In each case Lilly received \$150 in settlement of damages.

On February 17 a final judgment of permanent injunction was obtained against Louis Sharr and S. Everett Tink, partners in the Sharr Drug Company, Pompton Lakes. The judgment was signed by Judge John Grimshaw, Jr., Superior Court, Chancery Division,

Passaic County.

The drug company had been charged with violating the minimum retail resale prices on Iletin (Insulin, Lilly) products.

On the same day, a final judgment of permanent injunction was obtained against Moe J. Friedman, of the Carolina Pharmacy, Irvington. It was signed by Judge Mark A. Sullivan, Jr., Superior Court, Chancery Division, Essex County.

The Carolina Pharmacy had been charged with fair-trade-law violation in the sale of 'Lextron' (Liver-Stomach Concentrate with Ferric Iron and Vitamin B Complex, Lilly).

A company spokesman said Lilly will continue to enforce compliance with the provisions of its manufacturer-retailer fair-trade contracts.

SAYS EFFECTIVE FAIR TRADE CAN HALT ANARCHY IN MARKETPLACE Author of McGuire Fair Trade Act Speaks At Bronx Druggists' Fair Trade Rally

Mounting efforts to make the fair trade laws work better than ever give promise of "halting the nation-wide plague of 'bootleg' selling and other price-chiselling tactics which now threatens to plunge the U. S. marketplace into anarchy," John A. McGuire, author of the McGuire Act restoring effective fair trade and special Washington representative of the National Association of Retail Druggists, said recently.

Mr. McQuire spoke at a mass rally on fair trade held by the Bronx Pharmaceutical Association, February 25 at the Park Terrace Hotel, New York City. Other speakers included George H. Frates, Washington representative of the N.A.R.D.; Marty H. Sasmor, executive secretary of the Association; Nicholas S. Gesoalde, secretary of the New York State Pharmaceutical Association; and Daniel J. Deodati, president of the State Association.

The growing number of fair trade legal actions seeking damages as high as a quarter of a million dollars which manufacturers of trade-marked products are initiating against discount houses and other "price-chiselers" is a significant sign that "fair trade will overcome this major danger to all U. S. retailers, big and small," Mr. McGuire told all those attending the rally.

Recent court decisions, the speaker stressed, promise to provide new legal weapons to cope with the destructive tactics of unfair competition now causing chaos in our system of mass distribution. Mr. McGuire cited a recent New Jersey State Suprene Court decision in the case of Sunbeam Corp. vs. Windsor-Fifth Ave. which gives manufacturers a legal precedent for getting the necessary information "to cut the back-alley supply lines of discount houses and other price jugglers."

A new approach whereby legitimate retailers can take direct action against "the price-chisellers who are trying to destroy them," has emerged from a New York Supreme Court decision in the case of three retailers, Roberts, Kluge and Lieberman against Nemiroff & Co., another retailer, the former Connecticut Congressman noted. A temporary injunction was granted, restraining Nemiroff & Co., from selling the fair-traded products of 46 manufacturers on the grounds that the defendant's violations of minimum fair trade prices damaged the business of the retailers bringing the suit. The speaker pointed out that in this case results were obtained which ordinarily would have taken 46 separate legal actions by the manufacturers involved. Noting that the case has been appealed to the New York Appellate Division, he said that "if this approach stands up in the courts, it will be a most significant step forward in the battle against the practitioners of unfair competition."

Stressing the responsibility which everyone has of respecting fair trade as a law and practicing it in good faith, the author of the McGuire Act said:

"The cause of fair trade is not enhanced by the double standard of people who may gladly accept the benefits of fair trade and yet cynically disregard the fair trade laws whenever they find it convenient to do so. Manufacturers who give lip service to fair trade but wink at persistent violators are guilty of this cynical double standard. Distributors who use price-chiselling whenever it suits them in order to swell their profits are equally guilty of this dangerous double standard. If they lose fair trade, they will have no one to blame but themselves because they will be guilty of collaborating in its destruction."

Fair trade, Mr. McGuire said, "has proved

itself as an economic and social milestone, as one of our most effective bulwarks against monopoly. Fair trade is in the spirit and tradition of real, live-and-let-live free enterprise. It helps the efficient little guy, the independent retailer, to stand on his own feet and to succeed, if he has it in him, without the constant threat of destruction by would-be monoplists."

A. H. ROBINS FIGHTS SUBSTITUTIONS

In line with their previously announced policy against substitution, the A. H. Robins Co., Inc., of Richmond, Va., has instituted legal proceedings against a number of retail druggists in Brooklyn, N. Y. The Robins Co. charges that on several occasions these druggists filled prescriptions specifying "Pabalate" with another product similar in size, shape and color not manufactured by Robins Co.

The Robins Co. has asked the court to enjoin these druggists from further substitution of their products and has petitioned the court to determine and award suitable damages as well as court costs and attorney fees incurred as a result of such substitution.

A CHANGING PROFESSION

In our modern age of atomic energy, jet propulsion and moving picture in our living rooms, we have become accustomed to rapid and even revolutionary changes. As in the fields of physics and electronics pharmacy over the past several years has produced truly outstanding changes. Modern progress in the fields of medical and pharmaceutical research and development have now reached the stage where approximately 1500 new drugs and

combinations are being made available each year.

It is estimated that well over 60 percent of the prescriptions being compounded by your pharmacist today were unknown 5 years ago while over 80 percent were not in use 10 years ago. To supplement these modern advances in pharmaceutical products your pharmacist must continue to have available the thousands of older drugs which have stood the test of time and have proven to be of value.

It is even more significant when we realize that these new drugs are truly effective and are capable of producing decided changes in the body and curing diseases which heretofore have never responded to medical treatment. No longer is it necessary to employ what was once known as "shotgun medication," that is a preparation containing 20 or 30 different ingredients with the hope that one of the drugs in this combination might help. This picture now has changed and the so called specifics of today have replaced the hopefuls of 30 years ago.

However these new complex pharmaceutical products since they are extremely potent require a great deal more care and supervision in handling. Many require special storage facilities to insure that they maintain their strength. Your pharmacist's responsibilities are continually increasing for not only is he expected to compound properly store and preserve these new drugs but he must be extremely well acquainted with the usage and dangers of them as well. Consultations between the physician and pharmacist have become increasingly necessary. More and more physicians are relying on the pharmacist for information on these new discoveries and the pharmacists must serve as a veritable drug information clearing house for the community.

As with many of our other changes, these profound advances in the field of pharmacy are primarily designed to allow you and your families to live healthier and happier lives.

PENICILLIN-

- 22. Paul, W. D., Rhomberg, C., and Wallace, E.: Penicillin by Mouth in Combination with Aluminum Dihydroxyaminoacetate, Jour. Ind. State Med. Assoc., 38:298-301, 1945.
- Wallace, E., and Paul, W. D.: Penicillin by Mouth in the Treatment of Late Cutaneous Syphilis, Amer. Jour. Syph. Gonorrhea and Ven. Dis. 30:480-484, 1946.
- 24. Leinfelder, P. J., and Paul, W. D.: Oral Penicillin in Ocular Inflammations, Amer. Jour. Ophthal, 29:450-451, 1946.
- Leirle, D. M., and Paul, W. D.: Oral Penicillin in Otolaryngology, Laryngoscope 56:352-359, 1946.

(Continued from Page 102)

PSYCHOLOGICAL-

necessary. This will often lead to an impasse which will make correct referral impossible, and often lead the patient into fruitless medical shopping. Thus a good referral can only be made when you have the patient's confidence and when an effective doctor-patient relationship exists.

SUMMARY

By a discussion of these areas, I have attempted to demonstrate to you, my non-psychiatric colleagues, that psychiatry is a basic medical science, and one which can be straight-forward and reasonable in its clinical applications.

REFERENCES

- Ebaugh, F. G., and Barnes, R. H.: American Jr. of Psychiatry 109: 538, 1953.
- Rangell, L.: Ann. West. Med. & Surg., 5: 610, 1951.
- 3. Grayson, M.: J.A.M.A., 145: 893, 1951.
- 4. Staker, M.: Cnad. M.A.J., 65: 128, 1951.
- Levi, D.: Lecture, Univ. of Colorado Med. Centre, 1952.
- 6. Parks, J.: Am. J. Obst. & Gynec., 62: 339, 1951.
- 7. Shands, H., Miles, H and Cobb, S.: Am. Practitioner, 2:261, 1951.
- 8. Iatrogenicity in Medicine, J. Mich. State Med. Soc., 49:79, 1950.
- 9. Ross, A.: Lecture delivered to the Veterans' Hospital, Denver, Colorado, 1952.
- 10. Asher, R.: Brit. Med. J., 2: 555, 1949.

Make Your Reservations Now!

Medical Annual Meeting Huron, S. D. May, 16, 17, 18

Headquarters
Marvin Hughitt
Hotel



NEUROLOGICAL SURGERY BY THE GENERAL SURGEON* G. I. W. Cottam, B.S., M.D., F.A.C.S., F.I.C.S. Sioux Falls, S. D.

In this day of specialization, some reasons should be given for the general surgeon entering the neurological field. Until June of 1953, we had no neuro-surgeon in our community. This meant that the general surgeon had to care for the critically injured cases that could not be moved and those without funds to go elsewhere. A third class of cases were those who came voluntarily, knowing that this kind of work had been satisfactorily done locally.

This paper is based on 98 neurological operations of various kinds with an over-all hospital mortality of 12%. In judging these cases, one must remember that they cover the period from 1933 to 1953. In the early part of the first decade, we were without antibiotics and sulfa. In the second decade, we had many more serious highway accidents. In looking over my cases, it is interesting to note that the higher incidence of infection in the first period is so balanced by the increase in serious accidents that the mortality for the two decades is about the same. For instance, the highest mortality of the whole series was in five brain abscesses with three deaths in the early 1930's. The lowest mortality was in four brain tumors, four posterior fossa operations and three nerve operations.

Another interesting observation is that the 71 middle fossa cases predominate in number but by far the worst injuries were the five

Paper presented to the State Meeting of the A.C.S. State Chapter, January 30, 1954, Huron, S. D.



Example of case of middle fossa meningocele encountered in new born.

anterior fossa cases. These cases, ranging from new-born to 81 years, are listed in the chart on the next page.

I would like to discuss the unconscious middle fossa injuries because of their frequency in this series. It will be noted that only five of the 71 were middle meningeal hemorrhages and the rest were subdural hemorrhages and hygromas. The two, extra and subdural, frequently occurred together but we classified them according to which was

98	OPER.	ATIONS:
	O	

12% HOSPITALITY MORTALITY

	o OPERAI			HODPHALIT MOIL		
AREA	CASES	OPERATION	TOTAL	PATHOLOGY	LIVED	DIEI
NERVES						
occipital	1	neurectomy	,3	neuritis	1	
ulnar	2	transposition		chronic neu-	2	
Phrenic	52	(not included)		ritis		
SPINE						
injury	1	Lumbar laminectomy		cord injury	1	
discs	2	22		nucleus pulposis	2	
tumor	1	,, ,,	14	metastatic hyper- nephroma		1
spina bifida	5	Excision		spina bifidas	4	1
tumors	2	Dorsal posterior root sections		metastatic ca. to vertebrae	2	0
meninin- goceles	3	Excision		meningoceles & my- elomeningoceles	2	1
POSTERIOR FOSSA						
cysts	2	cerebellar exposure		extra cerebellar traumatic cysts	2	
thrombus	1	Left cerebellar exposure	4	thrombus sigmoid sinus	1	
foreign body	1	Post. fossa craniotomy		steel point penetrating	1	
MIDDLE FOSSA				,		
tumor	1	Flap operation & bilat. decompression		large inoperable oligodendroglioma	1	
tumor	1	Flap operation	71	astrocytoma	1	
abscesses	5	Craniotomy & drainage		abscesses	2	3
midmeningeal	5	Bilat. craniotomy		extradural hem- orrhages	5	
subdural hema- tomas & hygromas	55	Bilat. craniotomy		subdural blood or fluid	52	3
foreign body	1	g. i.i.				
depressed frac-	2	Craniotomy		brain penetration	1	
tures	24	Elevation		fractures	2	
meningocele	1	Excision		infected menin- gocele		. 1
ANTERIOR FOSSA						
trauma	5	Anterior fossa craniotomies		Egg-shell frac- tures with brain laceration	5	
suspected tumor	1	Bilat. frontal craniotomy	6	old frontal lobe hemorrhages		1

the major entity. For instance, if one had a small extradural and a large sub-dural, the case was classified as the latter.

In treating these unconscious patients, the matter of transportation to the hospital is of prime importance.⁶ The neck should be splinted with the best material at hand. A newspaper, or a folded blanket is advocated by some. The patient should be placed on his stomach or on his side,¹⁰ with the head lower than the body and feet. Three patients sent to us died enroute because they were transported in the upright position. Aspiration of vomitus or strangulation on the tongue will either cause a fatality on the way or the patient arrives at the hospital in desperate condition.

The treatment at the hospital in the first few hours is medical. The patient is placed in bed in the ambulance position just mentioned but it is much better to put the head at the foot of the bed. Most hospital beds have such a high head-piece that it is easier to look after the patient in this reverse position.

Every attention and effort should be directed toward getting oxygen to the brain, 7 so nasal oxygen is instituted immediately. A clear airway must be maintained by whatever means necessary.11 If the pharynx needs aspiration, it should be done gently so that edema of the soft palate is not produced. Proper oxygen and carbondioxide exchange in the lungs must be encouraged by relieving tension pneumothorax. We do this by one or two ureteral catheters passed through a #13 needle into the pleural space and attached to an underwater seal. Paradoxical respirations are relieved by towel clips hooked to the ribs and 5 lb. weights or, if time allows, subperiostal wire is attached to the ribs and similar weights over pulleys. Towel clips will not produce a pneumothorax if they are removed within a week. To transport oxygen to the brain properly, the circulation must be kept up by transfusions. In order that the brain can utilize oxygen, the edema is combatted by concentrated plasma,3 20% glucose, sucrose or other hypertonic solutions. We use 10 c.c per pound of body weight total fluid in each 24 hours.

In order that it will be safe to turn the patient on his back and elevate the head above body level, we insert a nasal siphonage and readjust his position. Later this same tube

can be used to feed the patient. We also place a retention catheter in the bladder and connect it to a bottle. An enema is ordered for every third day.⁷

Medications are not very many but we give dihydrocyllin twice daily, tetanus anti-toxin, if indicated, and if the patient is extremely restless, maniacal or has convulsions, sodium luminal is given. Morphine, of course, is not used but if there seems to be pain, small amounts of Demerol are permissible. If there are scalp cuts, these are washed with green soap, debrided, and a sterile pressure dressing applied after dusting with penicillin sulpha powder.

A complete physical examination can now be done and this is followed by a neurological examination. In an unconscious patient, it is impossible to do a complete examination of this kind but you can get a good idea by some routine measures. The degree of resistance to painful stimuli is very helpful. Pinching the side of the neck, the top of the shoulders, inner sides of the arms and legs will often reveal areas of anesthesia or paralysis, if the defense reaction is not adequate. Pressure on the supraorbital nerves is also included. The third to the 12th cranial nerves can be tested or observed with a little ingenuity.8 The deep and superficial reflexes are absent at first, but later will return. The pathological reflexes are also unreliable to begin with but later may have great significance.

In the acute phase, spinal puncture is dangerous because of the possibility of a pressure cone that would produce an immediate or delayed critical spinal puncture. The latter condition would mean immediate operation at a time when your patient is not yet in good enough condition for the procedure. After the acute phase, spinal puncture may be advisable but it should always be done with a manometer and a Queckenstedt should never be done. If you reduce the pressure, only take off enough fluid to let the pressure down 1/2 the increase over normal. The usual laboratory needed in an unknown patient is a C.B.C. and U.A., blood sugar and urea, Wassermann and CO2. The CO210 is ordered for every third day becuse of the respiratory alkalosis or acidosis that usually develops. Portable Xrays are taken of all regions suspected of in-

Nurses should be ordered around the clock.

We give these nurses specific instructions because many are not familiar with this type of case. Detailed, written information and orders are provided for the patient.

While many procedures are done simultaneously, the order of importance in a badly injured patient is essential to know, from the standpoint of time. For instance, if you have an unconscious patient with a broken neck, tension pneumothorax, bleeding spleen, fractured pelvis and extremities, the order of treatment should be: neck, chest, spleen, fractures and head operation last.

Contraindications to operation are important to know. However, operation may be contraindicated in the first twelve hours or more and later become an operable case. The first contraindication is sudden massive hemorrhage whether extradural, subdural or subcortical. A severe generalized contusion may simulate these hemorrhages and should not have an operation. These patients are diagnosed by their moribund condition in a relatively short time after the injury. The general condition is extremely poor and there is little or no response to painful stimuli.

Severe brain stem injury is the second contraindication. This is diagnosed by testing the third to the twelfth nerves inclusive and by such respiratory and general disturbances as Biots and Cheyne-Stokes breathing, yawning, sighing, hiccoughs and vomiting. Also such cardiovascular findings as ascending systolic and diastolic pressure, and slow followed by a fast, thready pulse. Spastic spells come from the mid-brain. It is not definitely known whether the temperature center is in the hypothalmic area or the brain stem, but a high fever shortly after a head injury is not a good sign.

One should not operate when the patient is in shock for several reasons.^{4, 5} The small vessels will not bleed at operation so that they can be seen and cauterized. After your operation, these vessels will again bleed and a hematoma will re-form. Furthermore, some of these patients have been on the cold ground for many hours before being discovered and therefore are in fatal, irreversible shock.

Fatal body injuries must be corrected before the brain operation. A bleeding spleen must be taken out under local and intercostal because it is more urgent at this time. We had one such patient with a torn kidney pedicle who lived because he was treated in this manner.

The above type of inoperables should be treated medically as already outlined. Some of them will survive and become operable at a later date.

The indications for operation are, in general, absence of the previously mentioned contraindications and a stabilized plane of unconsciousness. It would be impossible to put down all of the reasons why a surgeon decides that it is the opportune time to operate. This judgment comes with experience only. We can, however, make a few generalizations and suggest when to surgicalize the patient. The early operation is done within the first twelve hours. These cases are arterial bleeding from the middle meningeal. The pressure builds up faster than venous bleeding and needs tending to earlier. It is suspected by a temple injury,² a weak arm on the opposite side, a dilated pupil on the same side and a lucid interval. X-rays of the region frequently show a fracture across the artery markings in the skull.

The operation is always done bilaterally3 and usually under local novacain 1 or 2% alone or in conjunction with I. V. Drip Pentothol Sodium. 12. 13 Local and endotracheal light ether with a moist towel around the face is used at times if the neck is not fractured, for example, if the operation is likely to be long. We have sometimes operated in the face down position with lowered head. Critical cases are operated on in their beds occasionally. Subtemporal approaches are used but the side least suspected is done first and may be only a burr hole and opening the dura which is left open even if the brain is normal9 and pulsating. On the side of the clot, it is well to enlarge the burr hole^{6, 3} to take all of the squamous portion of the temporal bone or more to get good exposure. The clot is removed digitally and with saline washings. The bleeding artery will then be seen and can be stick tied at the bleeding point or the foramen spinosum can be packed with fascia. The dura is opened and left open. The wound is closed in layers. As a temporary measure, I am not in favor of ligating the external carotid since the above procedure is not difficult and one cannot always distinguish between an extradural and a subdural hematoma.

Foreign bodies should be removed early because of the danger of infection. Depressed fractures should also be elevated early. This is done through a small burr hole at the side of the depression and passing an instrument under the skull to the center of the depression with an outward prying motion.

The delayed operations after twelve hours are more apt to be for subcortical and subdural hematomas or hygromas. The diagnosis is made on continued unconsciousness which is neither improving nor disintegrating. Also by unconsciousness which has reached a stable point and begins to disintegrate. Localizing findings such as paralyses8 and convulsions may also be present. Mania and psychotic actions may be present, particularly in subcortical hemorrhages. The bilateral operation is the same as for middle meningeal except that much more bone may have to be rongeured away if your saline washings show fresh blood to be coming from some distant area of the brain. Try to stay within the temporal muscle bed if possible. A few radial burr holes around your rongeured area may locate the bleeder but if not, rongeur outside the muscle bed because the bleeding must be stopped. The field must be bone-dry when vou close.

If the patient has had brain stem symptoms, I like to lance the tentorium⁶ (Munro) to let the pressure out of the posterior fossa. The subdural clot has already pushed the brain over so the tentorium is visible with a lighted retractor after evacuation of the clot.

Subcortical clots can sometimes be located by gentle palpation of the cortex and evacuated, but not near regions of the angular gyrus⁹ or the Rolandic and Sylvian fissures. The wound is closed in layers if the field is dry, but the dura is left open.

NOTE: Occasionally a severe generalized contusion cannot be differentiated from a subcortical hemorrhage at operation. If you do not find a hematoma or hygroma at operation, some surgeons do an immediate ventriculogram¹ with gratifying results and no harmful after-effects.

Late operations are done weeks or months after the original injury. They are apt to come in older people who have disregarded a slight bump on the head sometime earlier and finally come into the hospital after a convulsion or sudden unconsciousness. Unless you have had a lot of experience and have full equipment, just do burr holes to release the clot only and do not try to take out the membrane at this time because it calls for a flap operation. As soon as the patient is well enough, send him to a brain surgeon for the membrane removal. If you have full equipment and experience, proceed with your flap operation to remove the membrane so the brain can re-expand. This re-expansion can be assisted by some normal saline in the spinal subarachnoid space or distilled water in the subdural space.

I have presented cases and discussed this neurological subject from the standpoint of the general surgeons of my era and circumstances, who have practiced in communities without a neurosurgeon. This circumstance, plus the depression of the early thirties and the shortage of doctors during World War II, are added reasons why we sometimes have to enter this field. The ambulatory and transportable cases were usually sent to neurological surgeons and we kept the ones who could not be transported and the ones that we knew that we could handle satisfactorily.

BIBLIOGRAPHY

- (1) "Normal Encephalogram" Davidoff & Dyke. 1937 Lea & Febiger.
- (2) "Textbook of Neuropathology" Ben W. Lichtenstein. 1949 W. B. Saunders Co.
- (3) "Operative Neurosurgery" Gurdjian & Webster 1952 William & Wilkens Co.
- (4) "Diagnosis & Treatment of Brain Injuries" William Sharpe 1920 Lippencott.
- (5) "Neurological Surgery" Loyal Davis 1936 Lea & Febiger.
- (6) "Injuries to the Nervous System" Donald Munro 1952 W. B. Saunders Co.
- (7) "Diagnosis & Treatment of Brain Tumors" Ernest Sachs 1931 C. V. Mosby Co.
- (8) "Clinical Neurology" Bernard J. Alpers 1945 F. A. Davis Co.
- (9) "The Cerebral Circulation in Health & Disease" C. F. Schmidt 1950 Charles C. Thomas Co.
- (10) "Nursing Care of Neurosurgical Patients" R. M. Klemme 1949 Chas. C. Thomas.
- (11) "The Care of the Neurological Patient" Ernest Sachs 1945 C. V. Mosby Co.
- (12) "Intravenous Drip Anesthesia with Pentothol Sodium" Geoffrey Cottam American Journal of Surgery. July, 1948.
- (13) "Hip Nailing in Patients of 80 Years or Older" R. E. & G. VanDemark American Journal of Surgery. May, 1953.



COLIC OR CATASTROPHE By John F. Cornely, M.D., C. B. Murdy, M.D. Aberdeen, S. D.

All of us who practice any pediatrics have received numerous phone calls from frantic parents about their children with acute pain in the abdomen. The descriptions are usually similar, in that the infant cries out, draws up its knees and the attacks are intermittent. The great majority of these cases may be relegated to the so called "colic" class.

On occasion, however, there is the case in which the onset of pain in the abdomen, usually in an otherwise well infant, merits prompt attention. It may be intussusception and can be a catostrophe.

I will not dwell on the etiology, pathology, etc. of an intussusception. The important thing is to make the diagnosis early and institute treatment at once.

The classical signs and symptoms of intussusception are:

- (1) Sudden development of abdominal pain.
- (2) Vomiting.
- (3) Tenesmus.
- (4) Bloody stools without fecal matter.
- (5) Prostration.
- (6) Abdominal tumor.

If enough of the above picture is present to warrant the diagnosis of intussusception early surgical treatment is of paramount importance. The mortality following delay of definitive care past twenty-four hours is extremely high.

The surgical procedure of choice is the simplest one possible to gain the desired results. In most instances the child's stomach will be empty. However, a few minutes taken

to pump out the stomach will often be a life saving precaution in prevention of aspiration of vomitus. Whole blood should be started by any available route if indicated. Preoperative medication of atropine in proper dosage will usually suffice. The anesthetic of choice is usually open drop ether except in the severly debilitated infant where cyclopropane is probably more desirable.

A fairly extensive right pra-median or right rectus incision should be used. Once the distal end of the intussusception has been located it should be delivered into the incision. Reduction can usually be accomplished by a proximal milking action on the intussusipiens. No traction should be exerted on the intussusceptum. Once the reduction is completed, if the bowel is viable, no further procedure should be done in most instances. Where there is a Meckel's diverticulum present as the cause of intussusception this should be removed.

If the intussusception is irreducible or if after reduction the bowel is non-viable, resection with primary anastomosis or a Mikulicz's procedure must be employed. The mortality rate jumps alarmingly when resection is needed especially in infants of six months and younger. It is well to emphasize that resection is rarely necessary if surgical intervention is early enough.

CASE REPORT

Baby D. L., is a six-months old white female who had been perfectly well until the morning of March 17, 1953. At 10:00 o'clock a.m.

the baby had an attack of acute abdominal pain followed by vomiting. This was followed by numerous attacks of intermittent pain. At about 2:00 o'clock p.m. the mother noticed a slight bloody show per rectum. At about 4:00 p. m. the baby passed a currant jelly stool and at this time began to look quite ill for the first time. I saw the baby at 6:30 p.m. and at that time there was bloody mucous in the diaper and the child was quite pale and listless. Temperature 101.2 (r) Pulse 88 Respirations 26.

Abdominal examination revealed a mass in the lower abdomen just inferior to the umbilicus. The diagnosis of intussusception was made and the child readied for surgery.

Under open drop ether anesthesia the abdomen was entered through a right paramedian incision. On exploration the cecum and terminal ileum was found to have telescoped as far as the sigmoid colon. A proximal milking procedure was used and reduction was accomplished. The cecum and about four inches of the terminal ileum looked gangrenous. Hot packs were applied and color did not return to the portions of bowel in question. The gangrenous looking areas were resected and an end to end anastomosis was carried out.*

Immediately after surgery 100 cc of compatible whole blood was given into the marrow cavity of the left femur.

The baby's post operative course was uneventful. Oral fluids were started on the first post operative day and dilute formula on the second post operative day. The baby was discharged on the eleventh post operative day on a full diet. Penicillin and streptomycin in full dosage was used.

The child has been checked at regular intervals since and has developed in a perfectly normal manner.

BIBLIOGRAPHY

- The Surgery of Infancy and Childhood, Robert E. Gross, M.D., D. Sc. Chapter 20, pp 281-300.
 Textbook of Pediatrics, Mitchell Wilson pp
 - 627-630.

*One finding of acte, was that of extremely large mesenteric lymph glands.

Something NEW is Cooking



MORE INSURANCE NOW AVAILABLE

HOW THESE AMOUNTS WOULD HELP IN PAYING ESTATE TAXES IN CASE YOU ARE ACCIDENTALLY KILLED ...



SPECIFIC BENEFITS ALSO FOR LOSS OF SIGHT. LIMB OR LIMBS FROM ACCIDENTAL INJURY

> \$4,000,000 Assets \$20,000,000 Claims Paid 52 Years Old

Physicians Casualty & Health Ass'ns. Omaha 2, Nebraska



WHY THE PRIVATE PRACTICE OF MEDICINE FURNISHES THIS COUNTRY WITH THE FINEST MEDICAL CARE Virginia Fultz Colome, South Dakota

The people of the United States are faced with a very momentous question. Do they want to surrender medicine's private enterprise in exchange for a socialized regime?

Promoters of socialized medicine are busy painting pretty pictures designed to lure the uninformed into believing that by putting the "X" in the right square, they can obtain a lot of something for nothing. This web of ignorance envelopes many of our people today and causes them to actually believe that they want to forfeit their privilege of consulting the doctors of their choice to receive the finest medical care possible as provided in private practice. They are willing to barter their health for the sake of a bauble labled FREE. A poll of 10,000 high school students showed that in March, 1950, 55% favored government control of medicine.

I want to explain why expecting socialized medicine to give free medical care to anyone is like reaching for the bauble in a soap bubble. Just before you reach the fool's scepter, the bubble bursts.

Foremost, what does "socialized" signify? It is the theory of social reconstruction abolishing individual ownership. It is a subdivision of communism, which has constantly aimed at a world-wide revolution. It is granting the government the authority of informing one group or one profession in what manner or where its members are to work. The general idea intends to change the economic regulation from one of private practice and owner-

ship to government priority. When this occurs, our Constitution no longer is living up to the Fifth Amendment which declares that "no person shall be deprived of life, liberty, or property." Our Preamble would no longer mean "We, the People of the United States, in order to form a more perfect Union, establish Justice, insure Domestic Tranquility, provide for the Common Defense, promote the General Welfare, and secure the Blessings of Liberty to Ourselves and our Posterity."

Medicine is the General Welfare of Mankind. It is the most outstanding human service. In the medical field the demand for experts is higher than in other professions. A doctor is demanded to be of scientific mind, great physical capacity of endurance, understanding of patients, sympathetic in all respects, and eager to relieve suffering and save human life. He has to be of sound reasoning and calm nerve. High educational standards are essential. College courses must be obtained before entering in any leading medical school. After the required years of preparation, the graduate physician must then serve one year as an hospital intern to gain acknowledged experience. The responsibility of the physician is assumed by long and precise preparation.

Ninety percent of the physicians have turned "thumbs down" on the idea of socialized medicine. They believe that the grueling years of preparation should signify their interest in their profession enough to grant them private practices. If the government took over, doctors would no longer be the select group that they are. Physicians standards would drop. With the shattering of the doctors' goal of private practice, the more capable would turn to other fields of professions and leave only the less qualified staff members to carry on government socialized medicine. When one's physical or mental condition is in need of medical attention, the individual is at the mercy of the doctor's ability. If the doctor is harnessed by government restrictions, his efficiency is curbed.

Promoters for socialized medicine claim that each person shall receive according to his needs regardless of his financial status. But in England where the program has been in effect since 1948 a "survey of the distribution of doctors by boroughs shows that certain wealthier districts (of London) have an average of one doctor for 1,261 patients, while in the inner East End there are 2,472, or twice as many patients, per doctor. For a group of southern boroughs, the average is 2,897."1

As long as the private practice of medicine is permitted to operate on the basis that it now does, patients can bask in the security of knowing that the secrets concerning their health will be kept secret. There isn't any list published of the patients cared for or their various ills treated. Government controlled medicine would necessitate the airing of the cause of ailments that had to be treated. A bit of bait that socialized medicine promoters are using is that the middle class of people can not afford medical attention and have too much pride to ask for financial aid from various welfare groups. I really believe that fear of having their health problems publicized will keep more individuals from seeking medical attention than will any shortage of funds.

We do have a problem so far as making medical aid available for everyone. Our people have long realized that the strong must

1. I.L.O. Report, Page 57

help the weak, but they want to do it from choice — not because the government demands such contributions. Proof of this are such organizations as the Red Cross, Heart Fund, Cancer Foundation, Salvation Army, etc. They operate on a free enterprise basis, and they do a good job. Voluntary health insurance is coming to the fore in solving the financial strain on persons who can not endure the burden of long illness.

We do not need government control and yards of red tape to take care of the medical needs of the American People. At the present time millions of persons are protected by one of the many voluntary prepaid medical plans. Bearing out this statement was the finding of the Western Conference of Teamsters which includes the eleven Western States. "Since July, 1950, we have provided medical coverage for upwards of 180,000 members and their families. The sole purpose of our plan is to protect our members by seeing that funds are available to pay for medical care when the occasion arises."

Yes, private practice of medicine does furnish this country with the finest possible medical care. Qualified doctors vitally interested in their patients and proud of their profession, doctors in whom patients can put their trust and confidence, doctors who are backed by years of scientific research serve the people of our United States. A diabolical force threatens to wipe out the progress this select group has made. All that needs to be done to make socialized medicine a part of our country is for two-thirds of the members of the United States senate present at a session ratify a "minimum standards of social security" as passed at a meeting of the International Labor Organization in Geneva, Switzerland. The rights and freedoms of our populace stand in grave danger.

Wake up, Americans, protect and maintain your inherent rights and privileges. Fight against compulsory socialized medicine. Maintain the high standards of medicine that have come through private practice.

ATTENTION

"Excellent opportunity for man out of internship to gain broad experience with specialist backing. Our group needs a man on a one or two year basis at \$1,000 per month. Write Box 11, S. D. Journal of Medicine, 300 First National Bank Bldg., Sioux Falls, S. D.



Since my term as president expires at the annual session in Huron in May, this is my last "President's Page." My final wish is that every member of the South Dakota State Medical Association will assume the responsibility of becoming thoroughly acquainted with the program of the American Medical Association and the State Medical Association, so that they can always be prepared to pass along correct information about what is going on in medical practice as well as on the socio-economic aspects of medicine.

As physicians, we owe a great deal to our communities. We should discharge our obligation by accepting civic responsibilities and duties which many leading citizens should assume. Some of our time and effort should be devoted to the good activities in our localities. The schools, churches, civic clubs, charitable activities, and local government all deserve



our interest and support. Our professional conduct reflects impressions of medical men as a whole. If most of the medical practitioners would take an active part in their local affairs, medical public relations activities would be largely unnecessary.

Members of the legislature will soon be chosen by vote of the people. Physicians should recognize their responsibilities as good citizens and take an active interest in inquiring as to the qualifications of the various candidates. By becoming personally acquainted with these candidates and presenting the facts of the medical profession on various matters pertaining to the health of the public, we perform a civic duty. Furthermore, members of the medical profession should study the various recommendations made to the Legislative Research Council by Griffenhagen and associates as they apply to the health of the public in general, care of the senile, tuberculosis and mental health programs, State Board of Health, laboratories, and various administrative boards. Then when the opportunity presents itself, you will be able to give a well-considered opinion regarding the proposed measures. We as physicians should constantly endeavor to keep pace in a changing, scientific world and to apply the changes for the good of the public, always striving to improve the physical and mental status of our fellowmen.

R. G. Mayer, M.D.

advantages of rapid absorption. wide distribution in body tissues and fluids, prompt response and excellent toleration extensive experience of physicians in successfully treating many common infections due to susceptible gram-positive and gram-negative bacteria, rickettsiae, spirochetes, certain large viruses and protozoa, have

Terramycin

as a broad-spectrum antibiotic of choice

PFIZER LABORATORIES, Brooklyn 6, N. Y. Division, Chas. Pfizer & Co., Inc.



TESTIMONIAL PRESENTATIONS

Made at the Dedication Ceremonies at the New Medical School Building University of South Dakota

Christian Peter Lommen

It seems most fitting that the library in the new building of the School of Medical Sciences at the University of South Dakota should be dedicated in memory of Christian Peter Lommen, who was largely responsible for the establishment in 1907 of the Medical School at the University. He was appointed and served as the first dean of this school until his death in 1926.

Most of his life was devoted to teaching and administrative duties at the University of South Dakota to which he was called as professor of biology in 1891 after receiving the degree of Bachelor of Science from the University of Minnesota. A year in the early nineties was spent at the University of Berlin, where he specialized in embryology. Then for several summers he was an investigator and instructor at the Biological Laboratories at Woods Hole, Massachusetts.

He was a studious man, a zealous, tireless worker and he became unusually well grounded in the whole field of biology. He taught the beginning courses in botany, zoology and physiology as well as the advanced courses in comparative anatomy, histology and embryology. In the early days of the Medical School, he taught all the histology and embroyology in addition to the college course in zoology. He kept well abreast of the advances made in the sciences which he taught. With high ideals, he aimed for the best in instruction, for well equipped laboratories and for an up to date library.

Those who took work under him were fortunate indeed for he was an excellent teacher. His lectures were well prepared and well coordinated with the laboratory work, of which he himself took charge. The students liked the systematic, clear and thorough way in which he presented the subject. It would be safe to say, however, that no student ever enrolled in one of his classes because it was easy.

From the beginning, the students who finished the basic science two year course in medicine at the University of South Dakota have made good in those schools where they

completed their clinical training. Many of them have received distinction.

It is worthy to note that his youngest son received part and his three other sons all of their education at home until their entrance in college, having been well prepared for this by their father's and mother's instruction.

Dean Lommen was always in sympathy with the activities of the University as a whole and in so far as possible lent his enthusiastic support. He had a pleasing personality, was a kindly, even-tempered and unassuming man who stood for right principles and honest work. He was liked and respected by his students and colleagues who appreciated his considerate and just dealings with them.

He was rightly named Christian. He lived an exemplary life and the influence and inspiration that he exerted on his students and his associates by his fine example is doubtless immortal in the sense that his good principles influenced his students and colleagues and they in turn influenced, or are influencing others.

May the scientific library which he collected, which has grown in size and value and which will continue to expand as the Christian P. Lommen Library be of immeasurable value to the faculty and students of the Medical School and of the University and to the people of the state.

Dean Lommen will always be fondly remembered by those fortunate to have known him.

This testimonial is written by one who was a student and colleague of Dean Lommen.

Ole O. Stoland

LEON F. BEALL, M.D.

Leon F. Beall, M.D., Irene, South Dakota's family doctor since 1904 passed away at his home, April 11th at the age of 75.

Dr. Beall was a veteran of World War I, active in his State and Local medical associations, and several years ago was granted honorary membership in the South Dakota State Medical Association.

He leaves his widow and one son.



THE DOCTOR AND THE VETERAN

One of the hottest problems confronting medicine and the public today is that of veteran's medical care. Differences of opinion exist among doctors, among veterans, and quietly, among the members of Congress.

No one denies the service-connected veteran his right to receive the best medical and hospital care his country can give him. All doctors agree that if the non-service connected veteran has ability to pay, he should utilize private facilities. Opinion is divided on what to do with the indigent non-service connected veteran.

This editorial is not intended to settle any of these differences but, perhaps, to help the doctor with a perplexing problem.

Whenever we complain to V.A. — officials that they are accepting non-service connected veterans who have ability to pay, they invariably reply that the patient was admitted on recommendation of his family doctor on the V.A. form 10-P-10. The doctor, in turn replies that if he hadn't filled the form someone else would have. In many cases the doctor would like to advise the V.A. officials of the status of the patient in a confidential manner but, finds the form leaving the office in the hands of the patient.

To end this circumstance, the doctor should insist that the patient's portion of the form be filled out prior to his arrival at the office. The **doctor** should than mail the form to the V.A. in Sioux Falls, adding confidential comments if he so desires. This will help eliminate abuses of V.A. largess and will give noone an opportunity to point to the doctor as the weak link in the chain of proper care for properly eligible veterans.

A word of caution — the service-connected veteran is entitled to your 100% cooperation and assistance at all times.

F.D.A. ATTACKS "QUACKERY"

U. S. Food and Drug Administration Halts Interstate Shipment of "Quack" Devices

Thirteen electrical devices which have been widely distributed for the diagnosis and treatment of serious diseases were barred from shipment in interstate commerce by an injunction decree entered in the Federal district court at San Francisco.

The Electronic Medical Foundation of San Francisco consented to the entry of the decree, which is also binding upon the officers of the Foundation and all persons in active concert or participation with them.

The Food and Drug Administration, U. S. Department of Health, Education, and Welfare, which initiated the injunction suit, estimates that there are about 5,000 of the devices now in the offices of various fringe practitioners throughout the country. The names of the machines are as follows:

Oscilloclast

Depolaray

Oscillotron

Depodatron

Regular Push Button Shortwave Oscilloclast

Depolaray Chair

Sweep Oscillotron

Depolatron Chair

Sinusoidal Four-in-One Shortwave

Oscillotron

Depolaray Junior

Galvanic Five-in-One Shortwave Oscillotron

Electropad

New Depolaray Junior

In addition to these machines the decree bans interstate shipment of "Blood Specimen Carriers" for use in a diagnostic machine, the Radioscope, which is maintained at the Foundation's offices in San Francisco. It also bans the shipment of any similar electrical divices for producing or measuring low-power radio waves or magnetic energy or any accessories or parts of such devices.

The Government charged that all the devices are misbranded, since they are not capable of diagnosing or curing any disease, much less the hundreds of serious diseases which it was claimed they will diagnose and treat effectively.

According to the injunction complaint, the Foundation's activities were divided in two major parts: The sale of a blood "diagnostic" service and the distribution of "therapeutic" devices. The diagnostic service was based upon the theory that any ailment can be diagnosed by measuring emanations from a dried blood spot on sterile paper. Practitioners who mailed in the blood spots taken from their patients received, for a fee, a diagnosis blank filled in with the diseases each patient was supposed to have, their location in the body, and the recommended "dial settings" for treatment with the Foundation's devices.

The Government charged that the Radioscope was represented as a "tuning apparatus" by which the defendants asserted it is possible to distinguish the alleged characteristics "radio frequencies" associated with different diseases. This device is a box containing dials, lights, and wires, and a slot in which may be placed a specimen carrier of filter paper bearing dried blood of the patient. Metal plates connected with the box are held by a person who is designated the "reagent" and who is supposed to serve as a "detector" for the radiations allegedly emanating from the blood spot. The operator of the machine strokes the abdomen of the "reagent" with a plastic wand. If the wand "sticks" to a particular location, that is supposed to be a manifestation of an "electronic reaction," and the operator allegedly can determine from the identity, kind, location and significance of any disease present.

Investigating the blood diagnostic service, Food and Drug inspectors found it was incapable of distinguishing the blood of animals or birds from that of man, or that of the living from the dead. Inspectors arranged to submit blood from an amputee and got back a report of arthritic involvement of the right foot and ankle which the man had lost several years before.

The blood of a dead man brought a diagnosis of colitis, while a sample from an 11-

week-old rooster submitted for a "recheck" on the previous diagnosis of a man, resulted in a report of sinus infection and dental caries. When a hamster's blood was sent in as that of a man, inspectors received a diagnosis of "tuberculous involvement," melancholia, and mixed toxins of the colon.

A spot of coal-tar dye sent as the blood of a woman was reported to indicate systemic toxemia contributing to lowered vitality and anemic tendencies.

FDA physicians found that in general the diagnostic reports consisted of a potpourri of medical jargon. A large portion of the reports refer to "common cold toxins," "colonic toxemia," and "lowered glandular functions," combined with references to the patient's history as supplied by the practitioner.

Each report included dial settings for treatment with the various "therapeutic" machines distributed by the Foundation. Laboratory tests of the latter equipment made by FDA scientists showed that the machines are of two types or combinations of these. One type consists of a coil producing a magnetic field similar to that created by home electric appliances such as a vacuum cleaner or electric doorbell. The other type is a low-powered transmitter generating radio waves in the 43megacycle region (i.e. the short wave band used by police, bus companies, railroads, etc.). Extensive tests of the devices showed that they are worthless for any therapeutic purpose, the Food and Drug Administration said.

The Foundation's literature, distributed to practitioners throughout the country, recommends use of the machines for treating hundreds of disease conditions including:

Anemia Angina pectoris Asthma Breast tumors **Bursitis** Cancer Cataract Coronary thrombosis Cystitis Enlarged prostate Gastric ulcer High blood pressure Hyperthyroidism Inflammatory rheumatism Inguinal hernia Mastoiditis

Septic sore throat Uterine tumors

Treatments are also recommended for minor or symptomatic conditions such as colds, backache, hornet stings, coughing, confusion, dizziness, indigestion, nausea, vomiting, night sweats, loss of weight, rapid heart, etc.

The injunction decree prohibits the shipping of any of the devices which is misbranded under the Federal Food, Drug, and Cosmetic Act because of any representation or suggestion in the labeling that it has value in the treatment or diagnosis of the diseases listed in the complaint or any other kind of disease, or has value in affecting any structure or function of the body; or which purports to produce low power radio waves or electro-magnetic energy, or low-frequency alternating magnetic energy which, when applied to the body, "normalizes" diseased tissue, thereby correcting disease conditions.

The Foundation, formerly the College of Electronic Medicine, was set up by the late Dr. Albert Abrams, inventor of the machines, to perpetuate his electro-medical theories. Fred J. Hart, president, has informed the Food and Drug Administration that research on the utility of the devices will be continued in Germany and Mexico, and that a magazine, "The Electronic Medical Digest," will continue to be published.

LETTER TO THE EDITOR

12 April 1954

Dr. R. G. Mayer, President South Dakota State Medical Association Aberdeen, South Dakota Dear Dr. Mayer:

On behalf of the South Dakota Chapter of the Student American Medical Association, we would like to express our appreciation for the support tendered to our Chapter in helping to make possible our representation at the coming Student American Medical Association Convention.

Please express our thanks to the membership of the South Dakota State Medical Association.

Sincerely yours,

Charles Geppert

President, S.A.M.A., South Dakota Chapter Alan E. Schumacher

Delegate, S.A.M.A. Convention

MEDICAL BOOKSHELF

Books and journals may be borrowed from the University of South Dakota Medical Library for one week.

Quick action essential!

Recently the daughter of a member of the University Medical Staff cut up into a "salad" the leaves of a tulip plant, ate them, and became violently ill. Several of the books on our pharmacology reserve shelf were of assistance to the pharmacologist on our staff and to the attending physician for effective treatment. The books and journals articles reviewed are on poisoning.

Poisoning: a Guide to Clinical Diagnosis and Treatment by W. F. VonOettinger Hoeber, 1952.

Time savingly arranged for tracking down the toxic agents and instituting effective treatment. Prt. 1. Classification of poisons, medicolegal aspects, emergency measures and equipment necessary for treatment. Prt. 2. Physician finds here under symptoms he has observed list of causative toxic substances. Prt. 3. Steps in management Prt. 4. Alphabetical listing of 461 poisons.

The Symptoms and Treatment of Acute Poisoning by G. H. W. Lucas. Macmillan, 1953.

This small reference book devotes special attention to treatment of poisoning in children. Dosages and modes of administration of drugs with list of available preparations and table giving domestic equivalent for solids and liquids for quick measurement are included.

Handbook of Dangerous Materials by N. I. Sax. Reinold, 1951.

Directed to the industrial physician, plant managers and others using hazardous materials such as explosives, fungi and fungicides and hazards due to radioactivity. 5,000 dangerous materials are listed giving treatment and antidotes.

Yearbook of Drug Therapy edited by Harry Beckman. Yearbook, 1953-54.

A short section on poisoning is in each number of the yearly series. The cases cited are of value for the method of treatment; results and use of new drugs. Treatment of snake venom poisoning with cortisone and corticotrophin as adjuvants is reported in the 1953-54 yearbook.

Get on the mailing list for

Ciba Clinical Symposia published by the Ciba Pharmaceutical Products Co., with anatomic plates by Frank Netter. The April-May, 1951 issue is devoted to accidental poisoning in children. This includes many of the common poisoning agents such as mushrooms, alcohol, insecticides, moth repellants, etc. describing symptoms and treatment.

JOURNAL ARTICLES ON POISONING

"Accidental poisoning of young children" by D. Swinscon. Archives of Diseases in Childhood 28: 642-643, 1953.

Statistics presented on deaths among children for accidental poisoning in England and Wales.

"Boric acid poisoning: a report of a case and review of the literature" by C. Brooke and T. Boggs. **A.M.A. American Journal of Diseases of Children.** 82: 465-472, 1951. Good discussion of treatment.

"Calcium disodium versenate in the therapy of encephalopathy" by F. E. Karpinski and others. **Journal of Pediatrics** 42: 687-699, 1953. Clinical and laboratory evidence of efficiacy of Versene in plumbism.

"Mechanism of poisoning from wax crayons" by F. Reiders and Heinrich Brieger.

Journal of the American Medical Association 151: 1490, 1953. Methemoglobinemia following ingestion of red wax crayons is obviously due to the presence of nitroaniline in certain brands or bunches of these crayons.

"Organic Phosphate insecticide poisoning" (parathion) by H. R. Chamberlin and R. E. Cooke. American Journal of Diseases in Children 85: 164, 1953. Two cases of poisoning in children with pharmacology, therapy and diagnosis discussed.

Mrs. Esther Howard Medical Librarian

Whenever You Are In Sioux Falls

Be Sure and Visit Our New Store . .



Complete Line of Equipment, Supplies and Drugs

KREISER'S Inc.

21st & Minn.

Sioux Falls, S. D.



This is your MEDICAL ASSOCIATION

PIERRE DISTRICT HEARS MAYER

The Pierre District Medical Society met March 29th at the Falcon Cafe in Pierre to hear **Dr. R. G. Mayer**, association president deliver a message as he made his official visitation.

Seventeen members attended the meeting which saw the following officers elected: President, L. C. Askwig, M.D., Pierre; Vice-President, J. B. Janis, M.D., Hoven; and Secretary-Treasurer, M. M. Morrissey, M.D., Pierre. The delegates remain the same as before being Dr. Askwig and his alternate, Dr. Riggs.

ABERDEEN DISTRICT HEARS SEIBEL

The Aberdeen District Medical Society held its regular monthly meeting on Wednesday evening, April 7, in the Mexican room of the Sherman Hotel. The wives of the physicians met with the doctors for social hour and dinner and then the women held their meeting, Mrs. Rodney Stoltz of Watertown, being their guest. The Scientific Program was provided by Dr. David I. Seibel from the University of Minnesota Medical School, who gave a very interesting talk on "Cancer of the Vulva, Cervix, and Endometrium' illustrated with lantern slides.

DOCTOR DRAFT REACTIVATED

The "doctor draft" program, interrupted in July 1953 because of high doctorpatient ratios in the military forces, has been reactivated and calls for Priority I & II men are now being made.

Additional calls for Priority III men born after August 30, 1922 will also be called.

Draft boards are now screening lists to meet summer calls.

LEGAL MEDICINE IS SUBJECT AT AMA MEET

A session on legal medicine will be incorporated into the program of the AMA meetings in San Francisco in June. Scheduled for Thursday morning, June 24th in the White Room of the Masonic Temple at 25 Van Ness Avenue, the program will take up the following: Advice to the Medical Witness; Malpractice- an Occupational Hazard; Medical legal Problems Related to Sterilization, a ratificial Insemination and

Abortion; Prevention of Transfusion Accidents; Legal Aspects of Medical Partnerships, etc.

LEGION-ASS'N. GROUP MEETS

A joint Legion-Medical Association committee met in Huron, April 11th to discuss problems of veterans medical care. While major disagreement on care of indigent nonservice connected veterans exists, major areas of agreement were found from which future plans of action will be formulated.

The Legion announced plans to review costs to counties if they were to accept responsibility for medical care of indigent veterans and the Medical Association announced it's survey, now completed, of how the doctors feel on the question of V.A. medical care.

MENTAL HEALTH WORKSHOP HELD

A mental health workshop, sponsored by the South Dakota Mental Health Association was held in Pierre April 10th. On the program as discussion leaders and consultants representing the Medical Association were: Dr. Charles Yohe, Yankton

State Hospital; Dr. W. P. Damm, Redfield State School; Dr. Clark Johnson, Yankton; and John C. Foster, association executive-secretary.

NEWS NOTES

Dr. Rudolph Avotins has located in Faulkton after practicing a year at the State Home in Redfield.

F. T. Younker, M.D., formerly of Sisseton, and more recently of Oregon, has located at Parker.

Dr. Anton Petres and his family were honored at an appreciation banquet by 300 people of the Hartford community on Tuesday, March 30th. Dr. Petres received a television set during the ceremonies.

Dr. John B. Gregg, recently of Iowa City, has opened an office in EENT in Sioux Falls, taking over the practice of his father who passed away recently.

Dr. C. S. Moran, who practiced since the end of WW II at Mitchell, has accepted a position as pathologist at St. Joseph's Hospital in Omaha.

Dr. A. B. Scales. formerly at Pickstown, will locate at Huntingburg, Indiana as soon as he leaves the Army.

PROFESSIONAL FILMS AND AUTHORS

To assure the listing of all outstanding professional 16-mm films — regardless of availability — in the forth coming "Directory of Pro-

fessional Motion Picture Films and Authors" now being compiled, all film authors are urgently requested to immediately write for film questionnaires. Other members of the profession are invited to cooperate in this endeavor by forwarding this announcement to an author or by directly providing the film title and name and address of any film author. Please send your valuable information to: Professional Publications, Compilation Department, 2010 Kentucky Street, Lawrence, Kansas.

Sincerely yours, C. D. Young, Director

CANCER MEET SET FOR DENVER JULY 14-15

The Eighth Annual Rocky Mountain Cancer Conference will be held in Denver on July 14-15, at the Shirley-Savoy Hotel. There is no registration fee for the conference, which is sponsored jointly by the Colorado State Medical Society and the Colorado Division of the American Cancer Society. program will include eight guest speakers covering radiology, dermatology, surgery, urology, pathology, internal medicine and gynecology.

MEDICAL SCHOOLS' RESPONSIBILITY

Although other medical organizations could participate, it is primarily the duty of the medical school to provide opportunities for continuation medical education

for physicians, according to Dr. Walter S. Wiggins in an article appearing in the May issue of The Journal of MED-ICAL EDUCATION.

A medical school, states Dr. Wiggins, should be judged on the quality of medicine practiced by its graduates throughout their lifetimes, instead of on their ability at the time of graduation. Since this is the case, the medical school should assume responsibility for keeping physicians up to date, stimulating hospitals to provide additional services for good quality medical care and for the education of ancillary personnel.

Dr. Wiggins criticizes the practice of relying too much on longer and more frequent lectures as the stream of medical knowledge grows He feels that a wider. sounder way to inspire interest in continuation medical education would be "to bring together the student, the patient and the teacher; or the student, the teacher and the laboratory, and be less concerned with counting the slumbering heads of registrants at our continuation courses."

Dr. Wiggins suggests, "We should utilize facts in teaching so that concepts may be learned and hope that the concepts are what remains after the facts that have been taught are forgotten."



ANOTHER VIEW OF THE MULTIPLICATION OF SPECIALTIES*

Perhaps the multiplication of pharmaceutical specialties should be viewed as an asset rather than a liability to the future of pharmacists who believe in making the practice of pharmacy their principal source of income.

One of the best answers to those who are pointing with alarm to the decreasing amount of compounding that goes on in a modern prescription department is that new and even more responsible duties are devolving upon the pharmics who specializes in prescription work.

There are those in the drug industry, and among lay groups, who, for their own purposes, try to belittle the professional service rendered by pharmacists. In doing so, they point to the increasing number of prescriptions which require only the counting out of dosage forms or the pouring of liquids from one container to another and writing the proper label.

But is it not the multiplication of specialties which really taxes the professional ability and experience of the practicing pharmacist today and makes him the indispensable man?

The continual addition of new trade-marked names for the same and similar compounds and formulations places new responsibilities upon the individual who translates the physician's prescription into a final package from which the patient receives his dose of medicine. The compounding of a prescription of U.S.P. tinctures, chemicals, medicated waters,

* An editorial by Robert P. Fischelis in the March issue of the Practical Pharmacy Edition of the Journal of the American Pharmaceutical Association.

and elixirs was a relatively simple task except when incompatibilities were encountered.

Knowledge of the form and usage of adrenosem, almebarb, bioepiderm, codempiral, dalzinate, erythrocin, edrisal, ethaverine, furadantin, gevrine, hexaverine, ilotycin, karidium — to cover only a random selection of relatively new names from the first ten letters of the alphabet - which may be called for at any minute in a modern prescription department today, presupposes a background in pharmacy, chemistry, pharmacology, and pharmacy administration, which would have taxed the ingenuity of Procter, Parish, Maisch, Remington, and their contemporaries to the utmost. And we are inclined to believe that these leaders of a past era would consider the practitioner of the present day as rendering a superb service by being able to stock and supply to the physician and his patient the right product from the great mass of packages, bottles, and vials of varying size, often with incomplete descriptive labeling, and miscellaneous ways of cataloging.

The practicing pharmacist of today has every reason to complain about excessive inventories of trade-marked products which do not deserve to be classified as specialties because they do not contribute anything new to therapeutics but are merely duplications of products developed by others.

Of course, the superfluous multiplication of specialties should be controlled but this can be accomplished to best advantage by voluntary professional methods. There is increasing evidence that the producers of specialties are aware of the label and impossible administrative situation which they have been creating and that they want to do something about it.

The practicing pharmacist who concentrates on prescription dispensing knows that the worse this situation becomes, the more essential are his services in preventing mistakes, misfortune, and catastrophe.

Let us not be too quick about asking for the kind of simplification which will give credence to the argument of those who ridicule the need for professional service by dwelling on the illusion that modern dispensing requires nothing but reading a label and counting out tablets or pouring from one bottle to another.

If we truly believe in the free enterprise system, we must believe in it for the other fellow as well as for ourselves. We should become a party to curbing excessive indulgence in uneconomical and purely selfish practices, but let us not try to make things so automatic and so simple as to aid those who are bent on turning the practice of medicine and pharmacy over to supermarkets and other merchants.

FAIR TRADE NEWS

A new era of fair trade has resulted from the United States Supreme Court refusal to act in the "Lilly-Schwegmann Case." Recently, in a bulletin issued by the Bureau of Education on Fair Trade, John W. Dargavel called upon manufacturers, wholesalers and retailers to "honor their fair trade contracts in good faith." He continued with the statement that "it is incumbent upon the friends of fair trade to do everything possible to make the laws work effectively and to help the public understand that fair trade fills a basic economic and social function and thereby serves the public interest."

Since national as well as local fair trade decisions and news are of interest to pharmacists in particular, the following items are presented as a summary of recent fair trade news.

Fair Trade in the Courts

One win in Indiana, one loss in Nebraska and three question marks in Arkansas, Delaware and Florida represent the current score on key court decisions on fair trade.

The first Federal Court test of Indiana's fair trade law was a victory. The case was Sherwin-Williams Paint Co. vs. Bargain Barn.

Federal Court Judge William E. Steckler of Indianapolis, in granting an injunction under the McGuire Act, said that Indiana's fair trade law protects the public "from predatory pricecutting."

Significantly, Judge Steckler added that "in general, the evidence in favor of fair trade

legislation showed, among other things, that the over-all result of fair trade laws is to lower, not increase, prices to the consuming public."

He said further that "predatory pricecutting threatens serious injury to producers of trademarked and branded goods and business generally, large and small, and leads to ruinous price wars; that fair trade laws help to prevent the growth of monopoly in distribution."

In Nebraska

A lower court ruling in Omaha, Neb. last month brought fair trade one of its few judicial setbacks. The case was General Electric vs. Brandeis Department Store.

G. E. will appeal to the Nebraska Supreme Court which has not previously ruled on the state law's constitutionality.

Grounds for the adverse lower court ruling: fair trade is held to be an unauthorized exercise of the state's police power, and a delegation of legislative authority into private hands.

These grounds have been over-ruled many times by many courts. Attacks on fair trade's constitutionality have been stopped cold 21 times in decisions by high state courts and the U. S. Supreme Court.

In Arkansas and Delaware

Both these states lack high court rulings on the constitutionality of their fair trade laws.

In Arkansas, Federal Court Judge Harry J. Lemley called a halt in Union Carbide & Carbon Corp. vs. White River Distributors, Inc. The judge wanted a state court ruling on the constitutional issue. A test case was promptly filed in Independence County Chancery Court by Union Carbide. Chances are it will be appealed to the high state court, whatever the outcome.

The Delaware Supreme Court has G. E. vs. Phil's Distributors, Inc. Questions of law are to be determined.

In Florida

Pending before the Florida Supreme Court are three cases: Miles Laboratories, Inc. vs. Payless Drug; Sunbeam Corp. vs. Chase & Sherman; and Sterling Drug, Inc. vs. Ekerd's.

The Miles case was appealed from an adverse lower court ruling. In the Sunbeam case, the appeal was from a favorable decision below.

All three cases concern constitutionality so they were consolidated for a decision by the Florida Supreme Court. This Court has not yet ruled on the constitutionality of the current Florida fair trade law. This law was amended by the State Legislature in 1949 to meet objections raised by the Florida Supreme Court in a previous decision.

Trading Stamp Developments

Giveaway gimmocks like trading stamps, coupons, premiums, etc. are being increasingly used to circumvent fair trade. They are now getting plenty of attention from lawyers, manufacturers and retailers.

Dr. John W. Dargavel, Executive Secretary of the National Association of Retail Druggists and Chairman of the Bureau, has pointed out that giveaways are a needless blight. "They are examples of unfair trade and can be curbed by court action, now that the Schwegmann case has resulted in a victory for fair trade," he says.

Outstanding legal experts on fair trade met this month to explore the legal questions involved in the giveaway problem and how they can be solved.

Rochester, N. Y. saw a successful retailer vs. retailer fair trade suit on trading stamps. Four druggists won an injunction against Wallack's Pharmacy. Named in the injunction were the following manufacturers' products: Norwich Pharmacal Co., Eli Lilly & Co., the Phillips and Bayer Divisions of Sterling Drug Inc., Colgate-Palmolive-Peet Co., Gillette Safety Razor Co. and Miles Laboratories,

Inc.

In Roanoke, Va., considered a tradingstamp hot-bed, Bristol-Myers is starting a case. Other companies are said to be weighing similar actions.

The Menance of "Bootleg" Selling

Some of the country's leading businessmen are recognizing more sharply just how discount houses and similar operators endanger a stable marketplace, newspaper advertising revenue and the economy itself. Fresh evidence on the scope of the discount house pours in. But stronger legal moves appear to offer a solution.

The automobile field is a leading practitioner, through exclusive dealerships, of resale price maintenance, also the foundation stone of fair trade. Last month, two of the giants, General Motors and Ford, sternly warned their dealers against the "bootleg" selling practices on new cars.

H. H. Curtice, GM president, called the practice a "malignancy" which, if not stopped "will eat away the very vitals of your business and ours. Henry Ford II said: "No other practice can so quickly and completely destroy your most valuable business assets . . ."

In a special bulletin, the National Association of Automobile Dealers told its members "emergency moves" are being rushed to "apply a tourniquet" to bootleg selling of new cars. The moves were said to involve "action by manufacturers and by government."

What is true for the automobile industry is true for every industry selling trademarked products, including all fair-traded merchandise. The price-footballing of brand name goods is a grim threat to manufacturers and distributors alike.

If not stopped, it will produce increased unemployment, bankruptcies and market chaos. Injury to a million retailers through practices being passed off as newly discovered "efficiencies" means depression not prosperity. Growth of Discount Houses

A 13-city survey by the Wall Street Journal this month shows how widespread discount house selling has become. An earlier survey by the National Retail Dry Goods Association, representing U. S. department stores, estimated that there are at least 10,000 discount houses in the U. S., doing from \$3 billion

to \$5 billion annually.

The Wall Street Journal survey adds evi-

dence that discount houses are driving more and more established retailers out of business; that stores are dropping national brands used as "bait" goods; and that advertising does not fare well at the hands of the "bootleg" operators.

The **Journal** survey says: "Though the discounters generally do little advertising themselves, they sell mostly nationally advertised brand-name products to obtain the shopper's confidence and to cash in on the manufacturer's national advertising."

A Houston, Tex., discount house executive is quoted thus: "We don't advertise in the newspapers or on the radio, but we usually send out some sort of circular showing retail list prices and our prices."

The evidence mounts that:

- 1) many manufacturers are still playing both ends against the middle, letting discount houses violate their fair trade prices and even making goods available to them.
- 2) more and more manufacturers realize they are cutting their own throats in dealing with discount houses. So they are taking steps to enfore their fair trade prices.

Stiff Damages and Jail?

New moves against discount houses include Argus Camera Inc.'s first fair trade suit against E. J. Korvette of N. Y. Argus is seeking \$25,000 in damages. Bristol-Myers has also joined the companies suing Korvette.

Violators may soon find themselves in jail if they persist in thumbing their noses at court injunctions on fair-traded goods. Masters' executives were threatened with six months in jail by a judge if they were caught being in contempt again of an injuction won against them by G. E.

Stiff damage suits for fair trade violations are catching on. Sterling Drug Inc. is asking \$25,000 in a fair trade action against Anderson Supermarket in Elizabethtown, Tenn, G. E. is out for \$20,000 in damages in two suits — one against Buyers Mart, Los Angeles, the other against the L. D. Woolen & Trimming Co., San Diego.

McGuire Says Discount Houses Menace Mass Distribution in U. S.

"The menace of serviceless, parasitic, quickbuck discount-house selling can destroy our American system of mass distribution," John A. McGuire, author of the McGuire Act restoring effective fair trade and special Washington representative of the National Association of Retail Druggists, said recently in Chicago, Ill.

Speaking at the national convention of the Master Photo Dealers' and Finishers' Association held March 18 at the Conrad-Hilton Hotel, Chicago, the former Connecticut Congressman said the camera and photographic supply business, along with all other established retailers, are threatened by discount house operators who "raid all fields where brand name goods are the retailer's bread and butter and make price footballs out of well-known brands."

Mr. McGuire outlined the economics, social and legal consequences of permitting discount houses to undermine U. S. retailing. He noted that this trend has "grim implications" for advertising since discount houses don't advertise but are forcing legitimate retailers to cut their advertising of national brands because discount houses are ruining their business

"The repercussions of retrenchment, forced upon U. S. retailers by unfair competition, are felt all the way back to our factories and assembly lines," the speaker said. When retailers drop national brands, manufacturers' sales fall off and inventories back up. Our mass production system must slow down and produce fewer goods. This means more unemployment and the vicious spiral of retrenchment grows.

"In short, if one million retailers—only half the retailers in this country — are hard hit by the practices of discount houses passed off as alleged new 'efficiencies', the end result can only be depression, not prosperity."

Mr. McGuire stressed that "fair trade can be made to work more effectively than ever in the marketplace and can prevail over the current threat of the discount house." He cited evidence that more and more manufacturers are recognizing that they must take action to halt the price-footballing of their products, that there is a growing trend to ask stiff damages of discount houses in fair trade suits.

Judges are beginning to warn discount house operators that they face jail sentences if they continue to disregard court injunctions forbidding violations on fair-traded products, Mr. McGuire noted. "It looks as though discount houses are not going to be permitted to

get away with flouting the law and the courts." he added.

"The crisis in the marketplace has reached a point where manufacturers will have to decide whether they want to deal with the responsible, established retailers who have made them great and whose merchandising principles are service and fair-dealing. Or do manufacturers prefer to deal with fly-bynight shopping speakeasies, operating in warehouses with phony membership cards—operators who flaunt a new code of irresponsibility, who boast of providing no services and let somebody else pick up the check in making good on quality guarantees.

"I do not believe that the vitally important distribution aspect of our free enterprise system will be permitted to reach such a primitive level where irresponsibility, deception and destruction of competition are the watchwords for survival.

"The alleged miracles of efficiency and

economy which the discount house parades are simply old price-juggling tricks in a new guise. They frankly use national brand merchandise as price-footballs but what about the hidden markups on the unfamiliar goods they sell? They use the pushcart peddler's approach to service, namely, no service. They victimize the consumer who may get stuck with defective merchandise and whose standards of value are destroyed so that she no longer trusts honest retailers with honest prices."

"It is the genius of fair trade," Mr. McGuire concluded, "that it stimulates growth for the little and the big. The support of over two million retailers attests to this fact. The record-breaking growth and prosperity of big manufacturers and big retailing, as well as the growth of small business since the advent of fair trade, will attest to this. At the same time, fair trade operates in the consumer's interest for fair trade prices have resisted inflation more effectively than any other prices."

AMENDMENT TO INTERNAL REVENUE CODE

H. R. 7817 introduced by Rep. Thomas E. Martin (R.-Iowa) has been referred to the House Ways and Means Committee. It amends identified sections of the Internal Revenue Code. It permits the U. S. Commissioner of Narcotics, Harry J. Anslinger, to issue regulations (after consultation with the various groups mentioned) allowing dispensing Pharmacists to accept oral prescriptions for simple non-habit forming compounds of codeine and other narcotic drugs which do not jeopardize the public health — for example, APC caps with codeine; Empirin compound with codeine; Apomorphine hydrochloride, etc.

The bill was worked out by the National Association of Retail Druggists in cooperation with Commissioner Anslinger and his staff after numerous conferences. The bill has the sanction of the Commissioner. Under present Federal law it is a violation to accept any narcotic prescription orally. Countless thousands of Rx's containing the above mentioned

and similar non-habit forming drugs are prescribed in everyday practice. The N.A.R.D. wants to legalize the acceptance of these Rx's orally, in order to expediate professional services and conveniences for the sick. It will take an act of Congress to do this.

If enacted, H. R. 7817 will permit pharmacists to receive oral Rx's for combinations containing non-habit forming narcotics in a manner similar to the way Barbiturates are now handled. The pharmacist will reduce the oral Rx to writing immediately. The container in which the drug or compound is carried will bear the name and registry number of the druggist, serial number of the prescription, name and address of the patient, and name, address and registry number of the practitioner. An oral prescription shall not be refilled. However, a pharmacist, by obtaining oral permission from the practitioner, may accept a new or duplicate telephoned Rx, in which case he treats it as above mentioned.



Marezine Hydrochloride

Marezine hydrochloride brand of Cyclizine hydrochloride is a new drug indicated for the prevention and treatment of motion sickness, nausea and vomiting of pregnancy and the symptomatic relief of vertigo.

The drug is one of several new piperazine salts synthesized by Burroughs Wellcome and Co. Research Laboratories.

Dosage

For the prevention of motion sickness on prolonged trips the usual adult dosage of 'Marezine' is 50 mg. three times a day, before meals, as required. For short trips one tablet one half hour before departure is usually sufficient. For children 6 to 10 years one half of the adult dose is recommended. In vertigo 50 mg. three times a day is recommended for adults. For nausea and vomiting of pregnancy, 50 mg. three times daily. It is suggested that the morning dose be taken 15 to 20 minutes before arising.

Side Effects

From the outset it has been apparent that 'Marezine' is a drug with wide passenger-acceptance due to the almost complete absence of unpleasant side effects. Major Chinn found the incidence of drowsiness, dry mouth, tinnitus, and headaches to be identical with the incidence of these symptoms in placebo treated patients.

Drowsiness was reported in only 4% of the 4,000 passengers treated on ships of the American Export Line.

Preparations

'Marezine' Hydrochloride brand of cyclizine

HC1 is supplied as 50 mg. compressed scored tablets in bottles of 100 and 1000.

Syrup of Antepar Citrate

Syrup of Antepar Citrate brand of Piperazine citrate is a new preparation indicated for the treatment of enterobiasis (pinworms). It is the citrate salt of piperazine in a pleasant tasting syrup, 100 mg. per cc. It is marketed by Burroughs Wellcome, and Co.

Dosage

Syrup of Antepar Citrate should be given for seven days; the next seven days are allowed to elapse without medication, then it is again given for seven days.

The following dosage schedule is recommended for children and adults:

Up to 15 lb. body weight, ½ teaspoon daily.

Up to 30 lb. body weight, ½ teaspoon twice daily.

Up to 60 lb. body weight, 1 teaspoon twice daily.

Over 60 lb. body weight, and adults, 2 teaspoons twice daily.

It is generally unnecessary to supplement Antepar treatment with enemas.

How Supplied

Bottles of 4 fl. oz. and one pint.

Extralin F

A new oral hematinic designed specifically for treatment of pernicious anemia and related megaloblastic anemias on a one-pulvulea-day basis is announced by Eli Lilly and Company. It is 'Extralin F' (Intrinsic Factor Concentrate with Vitamin B_{12} and Folic Acid, Lilly).

'Extralin F' fills the need, often expressed by hematologists, for a one-pulvule-a-day therapy which would provide the maximum of convenience and therapeutic effect as well as the specific design which appeals to the specialist.

The new hematinic contains intrinsic factor and vitamin B_{12} (extrinsic factor), the inseparable twins of effective oral P. A. therapy, along with folic acid, which has been clinically demonstrated to have an apparent synergistic effect in conjunction with the B_{12} .

'Extralin F' represent a significant advance in concentration of the therapeutic constituents over older specifics for pernicious anemia. In contrast to the one-a-day schedule, the earlier formulas called for daily dosages of nine to twelve capsules.

A Lilly clinician points out that because 'Extralin F' is a highly concentrated, specific therapy it does not compete with wide-range hematinics.

'Extralin F' is the eleventh major hematinic product introduced by Lilly since 1928, when the company was the first to bring out a liver concentrate for treatment of anemias.

The dark red 'Extralin F' pulvules are supplied in packages of 30 (a month's supply), 500, and 5,000.

New Intravenous Form of Chlormycetin Developed

A new intravenous form of the antibiotic, Chloromycetin, was announced by Parke, Davis & Company. Chloromycetin has been used by physicians in the treatment of more than 11,000,000 people throughout the world.

Called Chloromycetin For Solution, the product is intended as a temporary emergency measure for patients unable to take the antibiotic by mouth.

"It should be discontinued in favor of one of the oral Chloromycetin products as soon as the patient's condition permits," the announcement said.

"Chloromycetin For Solution is therapeutically effective over the same wide range of clinical entities which have been found to respond favorably to Chlormycetin when given by the oral route," the announcement added.

Chloromycetin For Solution is the eighth form of the antibiotic developed to date by Parke-Davis, whose scientists discovered the antibiotic and made the first clinical test in 1947.

Chloromycetin For Solution is supplied in ampoules containing 0.5 Gm. chloromycetin. An ampoule of 50% solution of N, N,-dimethylacetamide is supplied for use in preparing the solution for injection.

Furadantin Pediatric Suspension

For treatment of young children with urinary tract infections Eaton Laboratories, Norwich, N. Y., announces Furadantin Pediatric Suspension, a new dosage form of Furadantin N.N.R. Used in a series of 43 pediatric cases, both acute and chronic, clinical and bacteriologic cures of the urinary infections were amazingly high — with only two cases not responding at all.

Furadantin Pediatric Suspension contains 5 mg. of Furadantin per cc. suspended in a water-miscible gel containing alcohol 10%. The highly viscous gel prevents settling of the Furadantin crystals.

Furadantin has produced especially good results in infections caused by Proteus species, with a noteworthy absence of serious side effects.

A yellow, cocoanut flavored, highly palatable thixotropic gel, Furadantin Pediatric Suspension comes in bottles of 118 cc. (4 fl. oz.) in a shelf pack of 12.

Suspension 'Co-Pyronil'

With the allergy seasons approaching throughout the country, Eli Lilly and Company offers a liquid form of its best-known long-acting antihistamic. The new product is Suspension 'CoPyronil' (Pyrrobutamine Compound, Lilly), which is golden-colored and has a coconut-vanilla flavor approved by Lilly's unique Junior Taste-Test Panel.

The more than 100 children who chose the flavor of Suspension 'Co-Pyronil' also selected its golden color because they associate the color with a pleasant taste.

The oral suspension extends the therapeutic usefulness of the 'Co-Pyronil' formula, making it available on prescription to patients of all ages, including infants, and offering great flexibility of dosage.

Two teaspoonfuls have the therapeutic effectiveness of a single yellow and green pulvule for adults, while one teaspoonful is equivalent to the small red pulvule of Pediatric 'Co-Pyronil.'

In the suspension the formula is a combination of long-acting 'Pyronil' (Pyrrobutamine, Lilly) as the napthalene disulfonate with short-acting, rapidly effective 'Histadyl' (Thenylpyramine, Lilly) and synergisticallyacting 'Clopane Hydrochloride' (Cyclopentamine Hydrocholoride, Lilly), both as the hydroxybenzol benzoate.

The over-all acceptability of the 'Co-Pyronil' formula may be based as much on the fact that effective doses cause almost no side reactions as on the fact that in nearly all cases complete clinical relief from allergic symptoms is obtained.

Suspension 'Co-Pyronil' is indicated for relief of allergic symptoms, especially nasal and ocular symptoms associated with hav fever and vaso-motor rhinitis; and for treatment of urticaria, allergic spasm of the gastrointestinal tract, and angioneurotic edema.

The suspension comes in pint bottles.

PHARMACEUTICAL INSTITUTE

About fifty South Dakota Pharmacists gathered at State College April 5-7 for the Annual Pharmaceutical Institute. As in the past the program featured speakers of national pharmaceutical prominence.

Program		
	Monday, April 5	
1:00- 1:30	Registration, Room 303, Union Building	
1:30? 2:00	Welcome_Dr. John W. Headley	
	President,	
	South Dakota State College	
	WelcomeNeil Fuller	
	President,	
	South Dakota Pharmaceutical	
	Association	
	Opening Remarks Floyd J.	
	LeBlanc	
	Dean, Division of Pharmacy	
2:00- 3:00		
	Dr. G. C. Gross	
	Professor of Pharmacology	
3:15- 4:15		
	Prescription Accessories	
	H. G. O'Connor	
	Becton Dickinson & Company	
4:15- 5:15	- ·	
	, - · ·	
	Tuesday, April 6	
9:00-10:00	The Extension Service and its	
	Responsibilities to the	

Pharmacist George I. Gilbertson Director of Extension Service

10:15-11:15 Research and Product Development in the Veterinary Field Dr. Lawrence W. Price Veterinary Professional Service. Lederle Laboratories



A group of South Dakota Pharmacists at the annual Pharmaceutical Institute sponsored by the Division of Pharmacy, South Dakota State College.

11:15-12:00 Films:

	"Behing Your Snapshots"
	Eastman Kodak Company
	"This Can Happen To You"
	Eastman Kodak Company
	Tuesday Afternoon
	ruebady rivernoon
1:30- 2:30	Divers Prescription Topics
	Robert Manning
	Manager, Salesman's Promotion
	Material Department,
	Eli Lilly & Company
	2-1 2-1-1
2:45- 3:30	Questions and Answers
	Dr. Lawrence W. Price
3:30- 5:30	Films:
	"Aureomycin"
	Lederle Laboratories
	"Varidase"
	Lederle Laboratories
	"In Glasstown, U.S.A."
	Owens-Illinois Glass Company
	"And the Earth Shall Give Back
	Life"E. R. Squibb & Sons
	"Formula For Profits"
	Lederle Laboratories
6:15- 7:15	Banquet, Union Building
7:30	Entertainment
9:00-10:00	State and Federal Pharmacy
	LawsBliss Wilson

Secretary,

South Dakota Pharmacutical
Association

10:15-11:15 New Medicinals

Associate Professor of

Pharmaceutical Chemistry

11:15-12:00 Summation and Discussion

-----Floyd J. LeBlanc

STATE CONVENTION AT ABERDEEN

Chairman Willis Hodson of the local convention committee announced the tentative program for the 1954 South Dakota State Pharmaceutical Association Convention to be held June 20-22 at Aberdeen.

Registration will begin Sunday morning, June 20, with the opening session Sunday afternoon. The opening session will be about one hour in length with the rest of the afternoon devoted to sports. Sunday evening the annual Drug Travelers Party will be held from eight to twelve.

Business Sessions will start Monday morning. Up to time of press the following speakers had accepted invitations to address the convention: Bob Buchanon, Northwestern Drug; Dr. G. C. Gross, Division of Pharmacy, State College; and a speaker from Lederle Laboratories on Animal Health. There will also be short discussion on Gift Wrappings for the Drug Store and Magazine Department Profits.

The members will be entertained by Jewetts Drug at a lunch at the country club Monday noon and the Annual Banquet will be held on Monday evening.

On Tuesday the final business session will be held. Dr. H. S. Bailey, Division of Pharmacy, State College will speak on "The Pharmaceutical Curriculum — A Changing Study in a Changing Profession." The Veteran's lunch will be held Tuesday noon.

A good attendance is expected for the entire convention and much work is planned for the business sessions regarding our Pharmacy Laws.

PHARMACY SCHOLARSHIPS

The Division of Pharmacy, South Dakota State College, has been in need of more scholarships for some time. Receently, Mr. Charles Dalthorp, Administrative Assistant at State College, wrote to a considerable number of people connected with the pharmaceutical profession in an attempt to obtain a few more scholarships for worthy, needy pharmacy students. Four tuition scholarships of \$84.00 each were obtained.

The staff of the Division of Pharmacy is very grateful and thank the following doners of these scholarships:

Lloyd Daniels, Aberdeen
C. D. Kendall, Brookings
R. W. Kendall, Brookings
Edgar Schmiedt, Centerville

FRANKLIN S. BOCKOVEN STRICKEN

Franklin S. Bockoven, 72, prominent Clark druggist and State Fair official, died March 16, in a Watertown hospital following a stroke.

A pioneer Clark resident, Bockoven moved to his present home in 1882 when his father homesteaded in Clark. At the time of his, death, he was treasurer of the South Dakota Pharmaceutical Association.

For more than 40 years he had been in charge of grandstand ticket sales at the State Fair in Huron. He was educated in the Clark schools and took his pharmacy training in Minneapolis. He was unmarried.

He operated a drug store in Clark, having been in business with his brother, William H., who died in January. His father started the store in 1882.

Bockoven had been treasurer of the Clark school board since 1916 and was affiliated with the Congregational Church in Clark. He recently celebrated his 50th anniversary in the Masonic lodge. He was a 32nd degree Mason and a member of the Eastern Star.

Surviving are a sister-in-law, two nephews, and a niece.

NEW PHARMACY INSPECTOR

The South Dakota State Board of Pharmacy recently announced the appointment of **N. F.** (**Frank**) **Jones** as pharmacy inspector for Eastern South Dakota. Mr. Jones will cover the area east of highway 281. His appointment started April 1, and will cover a six months term.

The new inspector sold the N. F. Jones Drug in Canton, S. D. last year, making a total of 34 years in the pharmaceutical profession in that city.

1954-55 BLUE BOOK LISTS 166,590 **PRODUCTS**

The new 1954-1955 AMERICAN DRUGGIST BLUE BOOK - 630 pages loaded with 60,878 price changes — was mailed recently to every retail druggist in America. The BLUE BOOK lists a total of 166,590 products.

Three helpful symbols have again been incorporated — exclusively — into the BLUE BOOK:

"Rx only" products are designated by (Rx) Narcotic preparations are designated by •

Exempt narcotics are designated by a circle with a dot in the middle.

These symbols help pharmacists as follows: If a customer wants to buy a prescription item over the counter, the "Rx" symbol indicates to the pharmacist that he must not sell the item without first getting an Rx. The narcotic symbols help the pharmacist in ordering narcotics from manufacturers or wholesalers. If a pharmacist uses ordinary forms to buy narcotics, the forms will be returned to him with the request that he order the items on a special opium order form issued by the Director of Internal Revenue in the pharmacist's district. Orders for exempt narcotics require the pharmacist's classification and narcotic registry number.

In addition to these 3 symbols, the new BLUE BOOK uses an asterisk (*) . . . to indicate fair trade minimum prices.

Published in a special easy-to-read type, the 1954-1955 BLUE BOOK also includes these features: Prescription Refresher Course . . . Merchandising Manual . . . Store Equipment Department . . . Animal-Poultry Health Guide . . . Index of over 7,200 Manufacturers.

Pharmacists who want additional copies of the BLUE BOOK may purchase them at \$7.00 per copy. Send check, cash, or money order to AMERICAN DRUGGIST BLUE BOOK, 250 West 55th Street, New York 19, N. Y.

CONTRACEPTIVE REGULATIONS

George P. Larrick, Deputy Commissioner of the Food and Drug Administration recently made the following announcement.

"Since manufacturers quite generally have accomplished the necessary revision of labeling, druggists may expect that contraceptive diaphragms will be treated in our regulatory work just as any other product that properly bears a prescription legend. In view of the conflicting and sometimes misleading stories that have been written about this question, you may be able to save the readers of your journal some embarrassment or legal difficulties if you call this to their attention."

PHARMACISTS ADVISED ON BEST USE OF COMPANIES' PROMOTION MATERIAL

How pharmacists can make the best possible use of the promotion material provided by pharmaceutical companies was outlined to the American College of Apothecaries in a talk on "Promoting Your Pharmacy" by Charles E. Lewis, vice-president of L. W. Frohlich and Company Inc., New York advertising agency.

Key suggestion among those offered by Mr. Lewis was that every pharmacy should set up a year-long schedule for displays.

"You know what general types you want to feature and at what time of the year you want to show them," Mr. Lewis explained to the group during its annual meeting at the Conrad Hilton Hotel, Chicago. "To plan in advance, make a list for yourself of the ten or twenty types of window and counter displays you can use throughout the year.

"Such a schedule can assure effective, timely use of displays offered by manufacturers. As soon as you hear of one, you know exactly how it fits in with your promotion plans for the year. Moreover, you can ask the detail man early in the year whether the types you need will be available. In this way, the companies can be of better service to pharmacy."

Apart from promotion, Mr. Lewis recommended standardized catalogs as an aid in efficient pharmacy management.

"More and more manufacturers are offering standardized catalogs," he said, "and in order to accelerate acceptance of the idea by other manufacturers, it would be helpful if each pharmacist would use his own binder and catalog all the material in one place, saving space and making reference more convenient, at the same time."



CONGENITAL HERNIA OF THE DIAPHRAGM*

with report of three cases
Wallace A. Arneson, M.D., F.A.C.S.,
Diplomate, American Board of Surgery
Sioux Falls, South Dakota

About 25 years ago, 75 per cent of patients with congenital hernia of the diaphragm died before the end of the first month. Now, with proper surgery, 90 to 95 percent survive. The diagnosis is simple and exact; the therapy is definite; the results excellent.

The embryology of the formation of diaphragmatic defects is complicated. Essentially there is a complete or partial absence of the membrane which separates the abdominal from the pleural cavities, thus allowing free communication between the cavities. Less commonly there may be absence of muscle between the leaves of this membrane, resulting in a hernial sac covering the herniated viscera.

DIAGNOSIS

There are several types of congenital diaphragmatic hernias. This paper will be limited to a discussion of the postero-lateral or pleuroperitoneal type which comprises 90 percent of all these hernias. More than 80 per cent of these occur on the left side and almost all have no hernial sac. The involved chest cavity is completely filled with intestines and other abdominal viscera with resultant collapse of the lung and displacement of the heart to the opposite side.

Postero-lateral hernias may obviously give symptoms referrable to the circulatory, respiratory, or gastro-intestinal systems, as shown by cyanosis, dyspnea, or vomiting.

*Presented at 1954 state meeting of American College of Surgeons.

The majority of the infants have symptoms immediately after birth, but others are able to tolerate the gross displacement of organs for many months with few symptoms.

On physical examination, the signs are those one would expect with a completely collapsed lung, a displaced heart, and a thoracic cavity filled with intestines. There are absent or slight breath sounds; often intestinal peristaltic sounds are heard. The abdomen may be scaphoid because of absence of contents.

With these signs and symptoms, the diagnosis may be strongly suspected. An ordinary chest roentgenogram will make it conclusive by showing intestinal loops replacing the lung and displacing the heart. Although barium by mouth will give a dramatic picture, it is preferably avoided because it is unnecessary and may precipitate an intestinal obstruction.

TREATMENT

Preoperatively these infants should be properly hydrated and the intestinal tract should be deflated. Enemas, gastric suction and an oxygen tent can accomplish the latter. Ideally, operation should be undertaken within 24 or 48 hours. Expectant treatment has no place in this condition.

The anesthetic of choice is cyclopropane administered through an intratracheal tube, thus allowing for positive pressure anesthesia. An infant mask with small tubes and a short circuit is essential because of the small respiratory exchange.

Before starting surgery, a cannula should be inserted into an ankle vein to provide a quick avenue for administration of blood.

An abdominal approach is preferable to a thoracic one because it is difficult to replace viscera into the underdeveloped abdomen from the thorax. There are no adhesions, as there often are in adults, and, in addition, the occasionally present malrotation of the intestine with obstruction (1 case in 6) cannot be repaired through the chest.

Either a paramedian incision or a subcostal one may be used. I have preferred the subcostal but Gross, with his large number of cases, uses the paramedian, with lateral retraction of the rectus muscle.

Upon entering the peritoneal cavity, the herniation of viscera into the chest is evident. Either a catheter or some other instrument may be inserted into the chest through the hernial opening to allow air to enter the pleural space. This facilitates removal of the stomach and intestines from the chest and prevents their being sucked back in while being delivered. A definite order of delivery should be followed: First the stomach, then the small intestine, then the colon and spleen. They should be kept outside the abdomen in warm moist packs while the hernial opening is closed. A malrotation should be looked for and corrected if present.

In the following cases I closed the opening by first denuding the edges, then using 3-0 silk mattress sutures to overlap one edge of the defect over the other. The free edge was tacked down with simple interrupted silks. This was the closure originally suggested by Gross, although he now feels that denudation of the edges is not necessary. Just before insertion of the last suture, the air should be withdrawn from the chest by means of a catheter and the lung expanded as much as possible by positive pressure. This is a most important step in the procedure.

Replacement of the viscera into the abdomen may be difficult but is successful in most cases. Layer closure of the abdomen with interrupted sutures should be done. Gross originally advocated closure of the skin only if there was too much pressure, followed in a few days by layer closure. However, he now feels that with early surgery and proper deflation of the gastro-intestinal tract prior to surgery, primary closure can be done in most instances. He has not used the two-

stage method since 1945.

If the defect is large, as in one of our patients, a variety of plastic procedures have been used, including use of a flap or muscle for reconstructing the diaphragm.

Postoperatively, blood and fluids are given as indicated. Feedings should be gradually restored to normal.

Gross found a reported mortality of 75 per cent in 1925. Up to 1940 only 31 operated cases had been reported and only 17 of these survived. Since 1940 the survival rate has been about 90 per cent.

CASE REPORTS

Case 1. A 3 months old white male was admitted to Sioux Valley Hospital January 5, 1950. There had been no symptoms until just prior to admission when the infant had begun to vomit. There was associated dyspnea.

The infant was well hydrated, and was a husky child, weighing 15 pounds 4 ounces. Except for absent breath sounds in the left



Fig. 1 (Case 1) Roentgenogram after barium enema showing gas-filled loops of bowel in left thorax with displacement of heart to right.

chest and a scaphoid abdomen, the physical examination was negative. The red blood cell count on admission was 3,600,000 with 12.1 Gm. of hemoglobin. The leucocyte count was 18,600. The temperature was normal.

Roentgenograms with barium by rectum confirmed the diagnosis of a congenital diaphragmatic hernia. (Figs | 1 & 2)



Fig. 2 (Case 1) Lateral roentgenogram showing barium-filled loops of bowel above diaphragm. The defect is in the posterolateral portion of the left leaf of the diaphragm.

Obstructive symptoms quickly disappeared and the infant began to have bowel movements. Dyspnea became less. Surgery was planned but on the third hospital day the temperature was 103°. Penicillin was given, with regression of temperature to normal.

On the eighth hospital day, following insertion of an ankle cannula, a cyclopropane anesthetic was given through an intratracheal tube. The incision was subcostal, and, upon entering the abdomen, the small and large intestine and stomach were found passing through the pleuroperitoneal opening into the chest. A catheter was placed through the

opening, the viscera were removed from the chest; the edges of the defect were denuded and closed with interrupted silks in an overlapping fashion; air was aspirated from the chest prior to placing of the last suture. No malrotation was present, so the stomach and intestines were replaced in the abdominal cavity, and closure was made in layers using interrupted 3-0 silk.

The postoperative course was uneventful. Penicillin was given. Feedings were gradually increased, gas was passed per rectum on the second postoperative day. By the third postoperative day the lung was almost completely expanded and the temperature was normal. The infant was discharged from the hospital on the ninth postoperative day with a completely expanded left lung as shown by roentgenogram. (Fig. 3)



Fig. 3 (Case 1) Posteroperative roentgenogram.

The diaphragm is intact, the left lung is reexpanded, and the heart is in its normal position.

Case 2. A 13 day old white female was admitted to Sioux Valley Hospital November

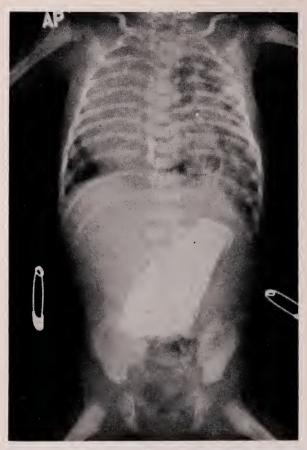


Fig. 4 (Case 2) Roentgenogram after ingestion of small amount of thin barium. The preliminary chest roentgenogram had indicated the correct diagnosis. This figure demonstrates the extreme shift to the right of the heart and the left thorax filled with intestines.

30, 1950 with dyspnea, cyanosis and vomiting since birth.

The infant was dehydrated, weighing 5 pound 6 ounces. Cyanosis was evident and bowel sounds were heard in the left chest. In this case also the abdomen was scaphoid. The red blood count was 4,700,000 and the hemoglobin 16.9 Gm. The temperature was normal. Roentgenograms showed a congenital diaphragmatic hernia. (Fig. 4 & 5).

Operation was performed on the second hospital day. The procedure and findings were identical with those of Case 1.

Again the postoperative course was uneventful. Penicillin and blood were given, the lung gradually expanded as shown by roentgenogram (Fig. 6) and the infant was discharged on the seventeenth postoperative day weighing 6 pounds 2 ounces.



Fig. 5 (Case 2) A roentgenogram taken after that in Fig. 4 showing in a striking manner the barium filled loops of intestine in the left thorax.

Case 3. This patient was a newborn infant with extreme dyspnea and cyanosis requiring constant oxygen in an incubator. Birth weight was 5 pounds.

Even momentary removal from the incubator was followed by increase in cyanosis and dyspnea. A roentgenogram of the chest confirmed the diagnosis of a congenital left diaphragmatic hernia. (Fig. 7)

Operation was performed immediately because of the deterioration of the infant's condition.

A closed system of anesthesia was used, utilizing oxygen throughout the procedure. A complete absence of the left leaf of the diaphragm was found. The abdominal contents were withdrawn from the thorax, but there was no possibility of constructing a new diaphragmatic leaf. The infant's poor condition precluded attempts at plastic repair. The abdominal incision was closed with interrupted



Fig. 6 (Case 2) Post-operative roentgenogram. The diaphragm is intact. The lung has not completely expanded and the heart is approaching normal position.

3-0 silk in layers.

The infant expired a few hour later.

SUMMARY AND CONCLUSIONS

Three cases of congenital diaphragmatic hernia have been presented. Making the diagnosis of a congenital diaphragmatic hernia of the pleuroperitoneal type is the responsibility of the physician who first sees the infant. Cyanosis, dyspnea,



Fig. 7 (Case 3) Roentgenogram showing left thorax filled with irregular shadows representing abdominal contents.

or vomiting should alert the physician and a stethescope placed against the chest wall should lead to a confirming roentgenogram.

Treatment is successful in almost 90 per cent of cases.

BIBLIOGRAPHY

Gross, R. E.: The Surgery of Infancy and Childhood. Philadelphia and London, 1953, W. B. Saunders & Co.

Wanted: Pediatrician for seven-man group in Midwestern city. Above average facilities with excellent financial opportunity. Box 15. 302 1st Nat'l Bank Bldg., Sioux Falls, S. D.



THE MEDICAL PROFESSION AND ERADICATION OF TUBERCULOSIS* by J. Arthur Myers, M.D., Minneapolis, Minn.

Fifty years of effort against tuberculosis has resulted in phenomenal accomplishments. As late as 1923, 373 citizens of South Dakota lost their lives from this disease but in 1952 only 73. However, in 1952, 191 new cases were reported. These were people who had fallen ill or had developed lesions large enough to be visualized by x-ray shadows they cast or were eliminating tubercle bacilli. This was only a sprinkling of the actual number of cases of tuberculosis in this state.

The veterinary profession of South Dakota has contributed significantly in the tuberculosis control program. Long ago its members recognized that tuberculosis among animals, particularly cattle, was a large economic problem and that the bovine type of tubercle bacillus is extremely destructive in human tissues. In those days a large volume of clinical tuberculosis in people was due to the bovine type of tubercle bacillus.

Veterinarians never made significant accomplishments in tuberculosis control among animals as long as they concentrated efforts on gross lesions. It was not until emphasis was changed so the attack was made on the tubercle bacillus that their great achievement was attained.

In 1892 veterinarians of this country learned by necropsy that every animal which reacts to the tuberculin test regardless of apparent excellent health has tuberculous lesions. They then considered various methods of eradicating the disease from cattle and finally found that the only truly effective method consisted of testing all animals with tuberculin and sacrificing the reactors. They were so firmly convinced that this would ultimately solve their problem that in 1917 they instituted a nation-wide tuberculosis eradication campaign with the county as the unit of activity. They set up qualifications for accreditation of counties. These required testing the entire cattle population with tuberculin. Whenever a complete testing revealed that not more than ½ of 1 per cent reacted the county was designated a modified accredited area. After this work had been in progress for six years only 17 counties in the entire nation qualified for accreditation. This was in 1923. By 1928 all of the counties in one state had been accredited. Hence, that state was designated a modified accredited area. From that time on one state after another was accredited the last being California in November 1940.

South Dakota was delayed in achieving accreditation until 1938 largely because opponents who had preyed upon the owners of cattle promising to protect them against their federal and state governments had concentrated in Sioux Falls. They were influential enough to prevent many cattle owners from cooperating in the eradication program in several counties in the southeastern part of the state.

Today every citizen of South Dakota should pay high tribute to veterinarians and their allies for their phenomenal accomplishment which largely solved a serious economic problem and markedly decreased mortality, morbidity and infection attack rates among

^{*} Presented before the Aberdeen District Medical Society, Aberdeen, South Dakota, January 6, 1954.

people.

Methods used in the past to control tuberculosis in humans have been excellent. For a long time they consisted mainly of diagnosing the disease after its victims were ill and reported to physicians for help. Provisions were made for sanatorium beds where many were isolated and treated. Most of them had been contagious before diagnoses were made. Later an attempt was made to find gross lesions by examining apparently normal people since it had been learned that chronic pulmonary tuberculosis rarely causes symptoms in the earlier stages of its development and often the disease is advanced before significant symptoms appear. This led to mass x-ray surveys of the chests of apparently normal groups of citizens.

All of this work has been fruitful and has resulted in such a change in the tuberculosis situation that some of the former procedures have become almost obsolete. More refined methods are now possible and are essential if tuberculosis is to be eradicated.

In many places tuberculosis morbidity and mortality rates have so decreased as to engender a sense of false security in the minds of the public and all too often in the minds of physicians and nurses. If the present true tuberculosis situation is not immediately recognized and acted upon promptly there is great danger that effort against the disease will be so reduced that it will result in morbidity and mortality rates as high as those of 50 years ago.

Most of our effort to date has been directed against gross tuberculous lesions. We have waited until they caused illness, cast x-ray shadows or eliminated tubercle bacilli found in sputum, bronchial or gastric washings and have then attempted to repair the damage. This has been worthwhile and at times and in places it was all that could be done, however, we have now arrived at the time when the attack must be made upon the tubercle bacillin rather than upon just the gross lesions it has produced.

Tuberculosis is a life time disease. That is whenever tubercle bacilli invade a human body whether it be in infancy or any later time including senility that body is likely to harbor colonies of these organisms for the remainder of life. At any time they may result in contagious lesions. In this way tuber-

culosis has perpetuated itself among people and animals since the dawn of history.

When tubercle bacilli first invade the body regardless of whether the portal of entry is the digestive tract, the respiratory tract, female reproductive tract, the eye or skin abrasions they are promptly phagocytosed by neutrophiles many of which quickly enter the blood stream. Within approximately an hour these tubercle bacillus containing neutrophiles lose ability to change their shape so as to pass through capilleries. Therefore, they lodge in these minute vessels where the tubercle bacilli multiply and tubercle formation begins. These points of focalization are multiple, that is, they occur wherever in the blood stream these neutrophiles are located when they become incapacitated. Some may be in or adjacent to the central nervous system others in such organs as the spleen, liver, kidneys, bones, joints and lungs. More lodge in the lungs than other organs because of their numerous fine capilleries. These minute primary lesions together with those that develop in the regional lymph nodes usually cause no significant illness. Calcium is often deposited in and around them and it is impossible to locate them by the conventional physical examination including x-ray film inspection. However, after these cultures of tubercle bacilli have been present for a few weeks the protein of those which have died and disintegrated results in allergy of the body's tissues including the skin. This attains such a degree within three to seven weeks that it can be detected by the tuberculin test. Tuberculin contains protein of tubercle bacilli and wherever it is brought in contact with cells and tissues which are sensitive to it, it results in a characteristic reaction. This reaction may be elicited by introducing a measured amount of tuberculin into the lavers of the skin, by applying it directly to a superficial abrasion of the skin or by applying it to the normal skin from which the oil has been removed by a fat solvent such as ether or benzine. A characteristic tuberculin reaction indicates the presence of primary tuberculous lesions containing tubercle bacilli in the reactor's body. Therefore, to find the persons in whom such lesions exist no longer requires bacteriological examination of sputum, etc. or pathological studies of biopsy material. The characteristic tuberculin reaction denotes

the presence of tubercle bacilli just as truly as though they are seen through a microscope or are grown in culture medium or laboratory animals.

There is no dividing line between tuberculous infection and disease as was so long believed to exist. Infection only denotes implantation of tubercle bacilli and as soon as this occurs lesions begin to develop.

Although nature usually firmly encapsulates the lesions of primary tuberculosis complexes with fibrous tissue, calcium and often bone, she may at some later time resorb parts of these capsules and thus liberate tubercle bacilli upon allergic tissues. This is known as endogenous reinfection. Even if this does not occur there may be new invasions from outside sources from any of the portals of entry such as the digestive and respiratory tracts. These are known as exogenous reinfections. There is reasonably good reason to believe that the majority of reinfections now occurring at least among people of the upper midwest states are endogenous. It is these reinfections that may result in clinical tuberculosis. Obviously, therefore, clinical disease always occurs in persons who previously have been and still are tuberculin reactors. They may occur at any time ranging from weeks or months to decades after allergy is established. An infant may become infected and remain free from clinical tuberculosis only to have it appear at the age of 80 or more years, having been a potential case of such disease throughout all the proceeding years. Many infected persons go through life without clinical tuberculosis, however, it has been estimated that from 25 to 50 per cent of all infected individuals at some time have clinical lesions many of which are postponed to old age. Clinical tuberculosis develops only in the bodies of persons who react characteristically to tuberculin.

These well established facts make our present and future course clear. Obviously this consists of finding all persons who react to tuberculin, examining them promptly to screen out the few who at the moment may have clinical disease and reexamining the remainder periodically so that the annual crop of lesions which evolve will be found before most of them cause symptoms or are contagious. The number of infected persons in most parts of the United States has so de-

creased that it is now within the range of physical possibility to carry out this procedure.

Already in some states in the upper midwest mass x-ray surveys are being abandoned because they are unsound economically wherever there is a low incidence of clinical tuberculosis and also because they miss many times more tuberculosis than they reveal. County-wide and state-wide tuberculin testing of people of all ages is rapidly being substituted for mass x-ray surveys with the proper, immediate and periodic examination of the reactors. This effort is exerted where there are tubercle bacilli which already have or may at any subsequent time cause clinical disease. The futility of conducting expensive procedures to find tuberculosis in 100 per cent of a population when tubercle bacilli exist in only 20 per cent is obviously a total waste of 80 per cent of the funds as well as time and effort of the workers. Moreover, it does not permit adequate surveilance of those who harbor tubercle bacilli.

No one knows how many South Dakota citizens harbor tubercle bacilli and this will not be known until the tuberculin test has been administered. However, on the basis of morbidity and mortality rates and countywide tuberculin testing in nearby areas it is probable that about 20 per cent are infected. The majority of the reactors will be found in the older age groups who as infants and children were not protected against tubercle bacilli as the younger age groups have been. On the basis of the state's population of 664,-000 in 1952 this would be 132,800 individuals. To find these persons the state's entire citizenry would need to be tested with tuberculin. Although this is a considerable task it is not too difficult to accomplish county by county. The tuberculin test may be administered either by the Mantoux or patch method. When the program is well organized one person can administer 300 intracutaneous (Mantoux) tests per hour with ease. About the same number of patch tests can be applied hourly. For intracutaneous administration a single test dose is adequate. One disadvantage of the patch test is that the patch must be removed in 48 hours and the reading is not made until 48 hours later. For older persons whose sensitivity may have waned the intractaneous method is preferable. A distinct advantage of the patch method for children and younger adults is that it can be administered by nurses. For many years the bulk of our testing by the intracutaneous method has been done by nurses in the most satisfactory manner. This is a distinct advantage because in most areas it more than doubles the number of persons administering tests.

With the turning point in the attack on tuberculosis having been reached with change of emphasis from finding and patching up gross destructive lesions to finding all persons who harbor tubercle bacilli and acting accordingly methods have been devised and their efficacy proved for creating interest and activity in the refined procedures which can lead to the eradication goal.

One of these methods was devised by the Committee on Tuberculosis of the American School Health Association. This consists of granting official certificates to schools on the basis of tuberculosis control work in progress. This was decided upon because it has been shown that in areas where good tuberculosis control programs have long been in progress in schools mortality, morbidity and infection attack rates have decreased much more rapidly than in other areas. A school program in which all of the children and the personnel participate constitutes the best possible educational work in this field. Moreover it frees the school from contagious cases of tuberculosis, locates all who are harboring tubercle bacilli so they are placed on the alert for subsequent potentialities and often finds in homes and the community the sources of infection of children.

Educators in public, parochial and private schools as well as other members of the personnel including engineers, janitors, bus drivers and cooks constitute a potent enemy of tuberculosis, if they have adequate information about this disease. This information they obtain by actual participation continuously in a school program. Children who are also participants obtain the best information available. It is only a brief time until they are through school and are engaged in the conduct of the affairs of their communities with a full understanding of the significance of eradicating tuberculosis. A school program extends far beyond the buildings in which it is conducted. Parents and other relatives of school children become interested and informed and not infrequently the entire community participates.

In order to make sure of its workability and its value the certification of schools project was placed on a demonstration basis in one state about 10 years ago. There it has proved to be one of the most effective measures ever employed from the standpoint of stimulating anti-tuberculosis activity. In this state almost 2.000 schools have qualified and now have official certificates displayed on their walls. Many other schools are working diligently to meet the qualifications. This is rapidly spelling the doom of members of personnel knowingly or unknowingly working in schools while they have contagious tuberculosis. It has also prevented the occasional high school student from spreading tubercle bacilli in the schools and in the community.

The certification of schools program is now being adopted by other states and there is no doubt that where it is given an adequate trial it will become a popular and permanent part of the entire tuberculosis eradication program.

The Committee on Tuberculosis of the American School Health Association has appointed or is appointing medical subcommittees in each state and some of the larger cities to direct the control of tuberculosis in the schools of their respective states. These subcommittees work in harmony and in cooperation with their state tuberculosis and health associations, state medical and nursing organizations, state boards of health, state and local veterinary groups and in fact all groups and individuals willing to help eradicate tuberculosis. The success of this project is dependent upon cooperation of all organizations and the entire citizenry. I am sure that South Dakota physicians everywhere will be pleased to know that Dr. R. G. Mayer. Aberdeen, is chairman of this State's subcommittee.

Another extremely valuable project consists of accrediting counties on the basis of accomplishments in tuberculosis control. This has been in vogue since 1941. It is a cooperative activity of the state medical association, the state board of health and the state

(Continued on Page 202)

A Medical Jaurnal Feature

DAKOTA MEDICINE MEN*

by John M. Russell, New York, New York

"In a northerley derection from the Mouth of this Creek in an emence Plain a high Hill is Situated, and appears of a Conic form, and by the different nations of Indians in this quarter is Suppose to be the residence of Deavels; that they are in human form with remarkable large heads, and about 18 inches high, that they are very watchfull and are arm'd with Sharp arrows with which they Can Kill at a great distance; they are Said to kill all persons who are So hardy as to attempt to approach the hill;"...¹

This, ladies and gentlemen, is the first reference to the South Dakota School of Medical Sciences that I have been able to discover. It is contained in a note written by Second Lieutenant William Clark of the United States Army at or near Vermillion on Friday, the 24th of August, 1804, and is the text for my remarks tonight. I propose to demonstrate that things have not really changed much in spite of your new building. Medicine men of today still tend to live on a "high hill," "are very watchful." Some even have "large heads," are armed with sharp instruments that kill at various distances. The differences between modern and primitive society are minor.

- *Banquet Dedication Program, School of Medical Sciences, University of South Dakota, Vermillion, South Dakota, March 27, 1954
- 1 The Journals of Lewis and Clark, edited by Bernard De Voto. Houghton, Mifflin Company, Boston, 1953, page 22.

I don't suppose that a dinner dance is a proper place to talk about primitive society—or even primitive medicine men, but the fact is that when the Dean asked me some months ago what I would talk about tonight, "Dakota Medicine Men" seemed a good title. It was only when I began to prepare the talk that I discovered the truth. I don't know a thing about Dakota medicine men! I could, however, but won't, ramble on about how things were done in a primitive society.

I could show you, for example, how, in certain Indian tribes, the selection of medical students was confined to a single family; I could show how the teaching methods were designed to pass on to the next generation the dogma of the medical faculty; I could show that the white coat and stethescope of today were embodied in the good old days by a special belt worn in a special way; I could show how training was spread over long periods in order to gather in more fees; how specialty board examinations were given — both Part A and Part B; and even how feesplitting was, and still is, a common practice among Indian practitioners.

However, we don't have time to go into these matters tonight. I would rather confine my attention to the Dakota medical men of the future, because it is the future that really counts.

In this age of un-American activities committees and trials for treason, it is not altogether safe to mention rebels with affection

or to admit that you were ever associated with one. Because of the emotions of the moment, no distinction is made between those fools who go about with a chip on their shoulder, with no real reason; and the selfish folk who always take the off side for personal gain; and the communist who does what he is told and is not allowed even to think for himself no distinction, I say, is made between these men and women on the one hand, and on the other, the rebels of our own history whose unselfish devotion to an ideal has made this a better country in which to live. As a Scottish friend wrote me, an acknowledgement of a copy of Freeman's "Life of R. E. Lee,": "I believe that the North had the right end of the argument and that it is a blessing that the South was defeated. At the same time (when it comes to hero worship), I can not enthuse over Grant — for which I am very sorry. I hope I have not got an ingrained sympathy for rebels; it may be so. Cromwell is another of my 'fancies'; and so is Milton — both rebels. And, of course, Scotland defied England for close on four centuries (and the odds against Scotland were eight to one); so perhaps it is in the blood."

I fear a respect for intelligent rebels is in my blood too. After all, you would not be here today if it had not been for the rebels who helped build this university and this medical school. Not only that; you would not receive the fine training you are getting if it were not for some of the rebels in medical education, such as those who founded Johns Hopkins Medical School — or that rebel Flexner, who helped set the standards as we know them in this country today. These are the rebels who take my fancy. It is this sort of rebel I hope you will be — intelligent, creative, and, in short, leaders.

In the past, medicine has had its share, perhaps more than its share, of creative leaders — men and women who never were satisfied with that profession as they found it, and who dedicated their lives to making it better. As a layman, it seems to me that there are too few of these people today. What really bothers me about the profession is that too many still live on a high hill, are very watchful and have large heads. Nothing gets my dander up faster than a person who knows it all and is fully satisfied with everything as it is. We have in the United States the best

doctors in the world, they say. We have the best medical schools, the finest research workers and laboratories. We have the best medical care. Some of this may be true, but this sort of talk when meant seriously is, for my money, the biggest danger this country has to face.

The really big danger is self-satisfaction — satisfaction with what we have, satisfaction with what we do. If our ancestors had been satisfied with what they had, if they had been satisfied with what they did, if they had been satisfied with their lot, this meeting tonight would be held down by the river, around a fire with the tomtoms beating. Because they were not satisfied, we are meeting on the fine campus of the university of South Dakota.

As a boy, when I was sent for the hair brush or the ruler. I made a mental note that I would never spank a son of mine. The trouble is that most people forget such resolutions and go right ahead and spank their offspring because that was what was done to them. No doubt, there will be times during your training when you will feel as I did about the hair brush and will vow that one day you will do something about it. I predict you will see more things that you would like to change and improve as you go on to the clinical years in other institutions, and later to practice, research or teaching. But the trouble is, you will tend to forget your resolutions, do nothing about them, and join the ranks of the satisfied.

As you go on to more advanced training and start your life's work, my plea to you is to remember that your profession is by no means perfect. Too few have remembered that fact in recent years, with the result that medicine has suddenly found itself very much on the defensive and not prepared to fulfill the demands made upon it. Medicine needs more intelligent rebels, more creative leaders; but in saying that, I am not calling for a revolution. Improvements in training, advances in research, better medical care, require time. Evolution is more effective than revolution. Real progress comes slowly, but there will be no progress without the help of each and every one of you.

Those of you who hope some day to establish a practice can do your part by remaining truly professional. You can, if you try, keep medicine from becoming just another big

business, or just another trade union. But to be a part of a great profession, to be truly professional men and women, is not at all easy. To be professional means to accept certain definite obligations. In your case, the obligations are three: first, you will have obligations to your patients — in other words, for human lives; second, you will have an obligation to society, to the country, and to the world in which you live; and, third, you will have an obligation to your fellow practitioners. Of these three, as a layman, I believe the first is the most important. Naturally, as I may need your professional help some day, I believe your main job is the proper care of patients. But also, as a layman, I believe your obligation to your fellow physicians and surgeons is to help raise the standards of the profession and to help stop the drift of medicine toward self-seeking private enterprise. Here is where your generation can assume real leadership.

Most of you, at one time or another, have had or will have a taste of the laboratory. I hope a good many of you will like its flavor and will decide to dedicate your lives to the advancement of knowledge. Money for research in the biological sciences has increased amazingly since World War II. Just how much is available, I have never heard anyone dare say. More laboratory space is being made available all across the country. Research is no longer confined to a few institutions concentrated in the East and Middle West. With money and facilities available, the great need is for research workers - competent research workers. I say competent research workers, because a scientist requires special skills and, what is equally important, special aptitudes, you will not know whether you have that sort of "green thumb" until you have given it a try. Some of you may say that the risk is too great; the chance of failure too serious. I say to you, that it is your duty to take the chance, because when you hold an M.D. degree you have the best insurance policy anyone can have against failure in this life. Some of you may say that the awards are not great enough, that you will starve. To you I say, dollars and cents are not the only rewards. True rewards and satisfaction in research are greater than any others in life. If you do not believe me, open the door of any laboratory in this University

and you will see what happiness really means.

Probably all of you believe you want to be teachers, or at least want to be associated some day with a teaching hospital or medical school. In medicine it is the popular thing to say that you want to be a teacher. Of the hundreds of men and women I have interviewed for National Research Council fellowships, almost all express this interest. I am not from Missouri, but I am a Scot. Hence, I wonder if they really mean what they say. Do they want to teach because they are interested in training the next generation of doctors, or are they really interested in themselves and how an academic connection will help them keep up to date in the practice of medicine and help to advertise their services. Be honest with vourselves. Do vou really want to teach?

I hope you do. I hope teaching becomes a passion with you because you, as students, know perfectly well that excellent teaching is worth everything. Better medical education is the foundation of the whole profession. Here is where we need some new rebels; here is where your leadership can go far.

One of these days, at long last, you will have passed all the initiation rites and will be able to write "M.D." after your name. You are traveling a long and difficult road. No one (not even I) would ask you to feel anything but deep contentment and satisfaction when you reach your destination. However, do not forget that even then you will still be you, only more so. You will have the same abilities and the same limitations. You will still be a human being with all the faults and shortcomings appertaining thereto. Certain privileges will go with the degree, it is true, but no degree carries with it greater responsibilities — the responsibilities of life and death — of happiness and sorrow. Because that is true, I hope you work throughout your life to improve — little by little — your great profession.

I opened my remarks by pointing out that the medicine man in primitive society had his human failings just as physicians do today. However, thanks to some good rebels, times do change, improvements are made. No doubt the high hill of a conic form described by Clark still stands; so does the Andrew Lee

(Continued on Page 202)



I have heard it said that a good president is one who makes an immediate decision and sometimes is right. Agreeing that this may be a good definition it may mean that the position with which you have honored me will offer an opportunity both for action and a chance to be right. The opportunity will be here since this is a legislative year. Whether the decision will be right will have to be decided as time progresses. I will have many occasions to call on you as members of our Association for help. Perhaps one of the things we should develop to a great degree is "good will." Good will is the greatest asset any business or professional organization can possess. Yet oddly enough it cannot be



bought, sold or bartered. Good will can be built for our profession through pride in our aims and accomplishments. This will create a feeling of responsibility and a desire to do our duty.

We many times hear people speak up very loudly concerning their rights and privileges but rarely do we hear people shout loudly that they feel they know their duties and will stick up for these duties.

In concluding this, my first President's Page, I'll again pledge myself to accomplish my duties as president to the best of my ability.

A. W. Spiry, M.D.

RESULTS OF SURGERY CONDUCTED BY COMMITTEE ON MILITARY AND VETERANS AFFAIRS OF THE SOUTH DAKOTA STATE MEDICAL ASSOCIATION

444 questionnaires were mailed to members of the State Association in practice in South Dakota excluding only those who are employed in Veterans Administration facilities.

324 returns were received for an excellent record of 72.9%.

The	Questions	and	their	results	follow
TIIC	& negrioris	anu	ULICII	resures	TOTTO W.

PERCENTAGE

	~ · · · · · · · · · · · · · · · · · · ·						21111101
1.	abilities incurred in service should receive	YES	ОИ	NO COM- MENT		NO	NO COM- MENT
2.	medical care in the V.A. facilities? Do you feel that veterans who have non-service connected disabilities and ability to pay should receive medical care in V.A. facilities?	320	3 318	2	98.8%	.9% 98.2%	.6%
3.	Do you feel that veterans who have non- service connected disabilities but are in- digent should receive medical care in V.A. facilities?	158	158	8		48.7%	.2%
4.	Do you feel that more V.A. hospitals should be built to care for additional non-service connected cases?	5	315	4	1.5%	97.2%	1.3%
5.	Do you approve of the idea of non-service cases having health insurance being cared for in V.A. hospitals and the V.A. collecting on the insurance?	25	295	4	7.7%	91.1%	1.2%
6.	Do you approve of the government paying premiums on health insurance for non-service connected veterans with incomes below a certain figure?	43	271	10	13.3%	83.6%	3.1%
7.	Do you think the South Dakota State Medical Association should participate in a program to educate the public on non-service connected veterans care?	272	40	12	83.9%	12.4%	3.7%

RESUME

72.9% of the members of the State Medical Association were interested enough to answer their questionnaires, most of them by return mail.

98.8% felt that service-connected veterans are entitled to full medical care in V.A. facilities for their service-incurred or aggravated disabilities. From unsolicited comments, there is an indication that many of the remaining 1.2% favor care at government expense in private facilities.

There was almost the same number agreeing (98.2%) that veterans having ability to pay and non-service connected disabilities should not have the use of V.A. facilities.

The matter of indigent non-service connected veterans split opinion down the middle. Just as many felt that they should receive care at the county level as felt they should receive it at the Federal level.

97.2% felt there should be no more V.A. hospital construction for non-service connected cases. As to letting the V.A. collect on insured non-service connected veterans, 91.7% felt that if the man is insured, he should utilize private facilities.

The Tennessee Plan of the government buying health insurance for veterans having less than a stipulated income, was favored by only 13.3% of the memberships. Many who commented indicated that this in itself was compulsory health insurance.

83.9% thought the State Medical Association should participate in a program to educate the public on non-service connected veterans care. The 14.4% opposed to an education program felt that it would be poor public relations.



WHO SPEAKS FOR DOCTORS?

Recently, a layman made a statement to one of the medical association's officers to the effect that the medical association did not speak for its membership, but only for a select few.

In many organizations the statement might be true, but certainly not in ours if we can base it on the results of a recent survey on veterans medical care. An unprecedented number of doctors answered the survey questionnaire (73%) and on nearly all questions averaged better than 90% agreement. This should be adequate proof to the critics that the medical profession is united and that its spokesmen do represent the membership.

CORRESPONDENCE

May 19, 1954

Mr. John C. Foster, Executive Secretary South Dakota State Medical Association 300 First National Bank Building Sioux Falls, South Dakota Dear John:

You may not have many doctors in your Association, but when I read over your annual report I could not help but feel that the old adage "Good things come in small packages" certainly applied to your society. The report of your activities should definitely indicate to the members the tremendous amount of service they are receiving from their state society.

"This Year in your Medical Association," while simply done, carries a message which I am sure was read by the majority of your members. Keep up the good work.

Sincerely yours, Leo E. Brown Dept. of Public Relations American Medical Ass'n. Doctor R. G. Mayer
President
S. D. State Medical Society
Aberdeen, South Dakota
Dear Doctor Mayer:

In view of the support over the Student American Medical Association Chapter at Vermillion, in defraying expenses of a delegate to the annual meeting, I thought you may be interested in a report of this meeting. This meeting was held at the Hotel Sherman in Chicago on May 1, 2, and 3, 1954.

The Treasurer's Report, as of March 31, 1954, showed SAMA to have assets totaling \$33,724.03, with a surplus of income over expenditures totaling \$4,721.35. A large portion of the organization's income is derived from membership dues, and the South Dakota Chapter is one of the very few which can point with pride to 100% membership in SAMA.

The Membership Committee reported that SAMA now represents students in sixty-seven medical schools. A proposal involving changes in the methods of approaching prospective members was tabled for further study.

Upon the recommendation of the Committee on International Relations, the following measures were enacted by the House of Delegates:

- 1. SAMA favors the establishment of a repository for the educational records of all physicians.
- 2. Since it was felt that not enough data was available, it was decided that an affiliation with the International Federation of Medical Student Associations would be unwise. This organization

(IFMSA) has not responded satisfactorily to SAMA's inquires, and its real value is dubious.

3. SAMA favors a medical student exchange program in the form of a summer clerkship.

The House of Delegates adopted the report of the Committee on Medical Education, which included the following points:

- 1. In view of the great interest in the annual AMA convention, SAMA shall petition for separate registration facilities for its members attending this meeting.
- 2. A resolution that SAMA favor the passage of legislation to ensure an adequate supply of dogs to medical centers by the method of requisition of unwanted and unclaimed animals (from pounds, etc.); and furthermore, that SAMA actively affiliate, through the local chapters, with coordinated efforts, on the part of the medical and allied professions, to expedite the passage of such legislation.

3. A recommendation that local SAMA chapters investigate the possibility of supplementing the available premedical counseling.

Upon the recommendation of the Committee on Postgraduate Education, the House of Delegates voted to apply for corporate membership in National Intern Matching Plan, Inc. The question of a minimum stipend for interns was referred to the Committee for further study.

The report of the Committee on Miscellaneous Business recommended that SAMA go on record as being in opposition to the principle of federal scholarships to medical students (to be repaid on a year-for-year basis in the Armed Forces). A motion to this effect was defeated, as was a substitute motion recommending approval. In effect, SAMA took no stand on this issue.

Under "New Business," the first subject considered was the appropriateness of the National Cancer Examination, as some delegates felt that the examination questions were not keeping pace with the latest advances in therapy. The subject was referred to the Committee for further study. Secondly, a motion of censure was passed against the very small minority of hospitals participating in NIMPI who attempt to circumvent their

contractual relationship by requesting confidential information from prospective interns of their preference.

Officers elected by the House of Delegates are as follows:

President:

John Oates (Bowman-Gray School of Medicine)

Vice-President:

Dan Hefferman (Wayne University)
Treasurer:

Don Overstreet (University of Alabama) Councilors:

Hugh Follmer (University of Nebraska) Gene Weston (University of Wisconsin) Nelson Fox (Medical College of Verginia) O. H. Patterson (University of Oklahoma) David LaFond (Marquette University) John McVey (Boston University) Jim White (University of Minnesota)

Total registration at the convention was 911. The 1955 meeting of the SAMA House of Delegates will be held May 6, 7, and 8 at the Hotel Sherman in Chicago.

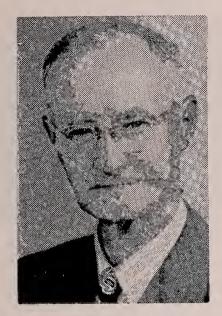
This report cannot hope to cover all the activities of the convention. When the House was not in session, the delegates were entertained at informative sessions featuring prominent physicians and medical educators; and also viewed the exhibits furnshed by the large pharmaceutical companies.

Let me express again my thanks to you for your support throughout the year, and especially for your help in making our representation at the recent SAMA convention possible. I will be happy to attempt to answer any questions you may have concerning either SAMA or its activities.

Respectfully submitted, Alan E. Shumacher South Dakota Chapter Representative Student American Medical Association

Wanted: Dermatologist for seven-man group in Midwestern city. Above average facilities with excellent financial opportunity. Box 15. 302 1st Natn'l Bank Bldg., Sioux Falls, S. D.

TESTIMONIAL PRESENTATION Made at the Dedication Ceremonies at the New Medical School Building University of South Dakota



Joseph Christian Ohlmacher, M.D.

One wonders why some young men struggle on year after year, toiling, rejoicing, and sometimes sorrowing, to reach a certain goal the objective of their ambition. What is the motivating force that drives them on, often to the verge of desperation? Perhaps it is an incentive engineered through contact with a great teacher or a close friend. In the parable of the talents we are told that each person is under the never-ending obligation to develop his abilities to the fullest. What these talents are is not so important as what use is made of them. There can be no halfway measures or compromising. This leads only to mediocrity or failure: the easy life ultimately results in a tinkling emptiness. But the individual who strives unceasingly to develop his full capabilities reaps rich rewards. In addition to the manifestations of outward success he gains a tremendous innermost satisfaction and joy. These intangibles are his permanent possessions and can never be destroyed.

These are the possessions of the man we are honoring to-day: the rewards reaped during a long and distinguished career. It was his patient example and friendly guidance that inspired many a struggling medical student to greater efforts. It was his vision combined with true administrative ability that developed the medical school of the University of South Dakota into a strong school with a Class A. rating: one whose students are highly regarded by medical schools everywhere. This fine new Medical Science building would not be possible to-day were it not for his untiring devotion to the cause of medicine in South Dakota. His never ending efforts to improve the status of medicine in our state are evidenced by his numerous articles in professional journals, his radio talks, his addresses before both medical and lay groups, his active membership in professional and learned societies.

Joseph Christian Ohlmacher spent his early life in a small town in Illinois. In 1901 he received his M.D. degree from Rush Medical College, University of Chicago. This was followed by a research scholarship in pathology in the same institution; then a teaching fellowship in pathology at Northwestern University School of Medicine and later an instructorship in pathology in the same school. After a period as pathologist at Independence and Clarinda State Hospital in Iowa, he was appointed professor of bacteriology and pathology in the School of Medicine at the University of South Dakota in 1918. At the same time he was made Director of the State Health Laboratory. In 1934 Dr. Ohlmacher was appointed Dean of the School of Medicine. This position he held until 1946 when he became Professor Emeritus but still continued as Director of the State Health Laboratory and pathologist at Sacred Heart Hospital in Yankton. Upon his resignation in July, 1952, Dr. Ohlmacher was retained by the University as Dean Emeritus and Professor of Pathology. He has served as president of the Yankton District Medical Society, the South Dakota Medical Association, and the Sioux Valley Medical Association. He is a member of the American Public Health Association and a Fellow of the American Medical Association.

(Continued on next Page)

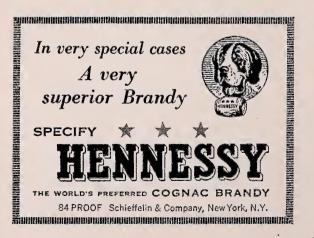
One must not overlook an important factor in Dr. Ohlmacher's success: the sympathetic and loyal support of Mrs. Ohlmacher. Together they reared five children in an atmosphere of love and kindliness. Their home, where friendliness was the hall-mark, was always a meeting-place for young people. From such a professional and personal accounting of the talents entrusted to him, it is clearly evident that Dr. Ohlmacher well merits the words of the Great Teacher: "Well done, good and faithful servant."

Julius A. Hohf, M.D.

March 27, 1954

HEART PROGRAM SET AT AMA

The American Heart Association will be represented by a special program at the 103rd Annual Meeting of the American Medical Association, to be held at the Civic Auditorium in San Francisco from June 21-25. The program will consist of a four-day "Question-and-Answer" Conference on various aspects of cardiovascular disease similar to the series conducted by the Association at the AMA Annual Meeting in Chicago in June, 1952. The program has been arranged by Howard B. Lewis, M.D., University of Oregon School of Medicine. An exhibit of professional educational materials available from the Association is also planned.

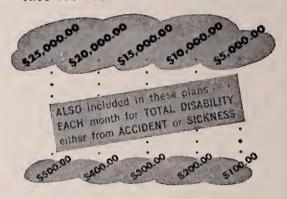


Something NEW is Cooking



MORE INSURANCE NOW AVAILABLE

TOUR HOW THESE AMOUNTS WOULD HELP IN PAYING ESTATE TAXES IN CASE YOU ARE ACCIDENTALLY KILLED ...



SPECIFIC BENEFITS ALSO FOR LOSS OF SIGHT.

\$4,000,000 Assets \$20,000,000 Claims Paid 52 Years Old

Physicians Casualty & Health Ass'ns.
Omaha 2, Nebraska

THE MEDICAL BOOKSHELF

CANCER

The output of writings on the subject of cancer is of such quantity that no one can read more than a small fraction of it. The following is a selected list of a few of the journal articles and books that are of significance to the practicing physician and surgeon.

The articles written by Dr. Alton Ochsner have been in demand by both medical staff and students following his recent address on cancer of the lungs, a challenge to the public and profession, delivered at the dedication of the medicine and science building at the University of South Dakota. One much discussed article entitled:

Bronchogenic carcinoma was published in the J.A.M.A. March 1, 1952, p. 691-697.

This article gives impressive evidence of the positive correlation between cigarette smoking and incidence of cancer of the respiratory tract, occurring more frequently in men than in women. The report is based on a study of 948 patients with bronchogenic carcinoma observed at the Ochsner Clinic and Charity Hospital in New Orleans and describes the pathology, clinical picture, diagnosis and treatment.

Bulletin of the American College of Surgeons. v. 38. \$5, Sept.-Oct., 1953. p. 339-353.

A list of hospitals conducting cancer clinics which conform to the College's Standard for Cancer Clinics gives only one in South Dakota, The Sacred Heart at Yankton. Institutions are listed under states for approved cancer clinics and also cancer diagnostic clinics. The minimum standards for cancer clinics are outlined on page 350. The trend in recent years to place emphasis on cancer detection in the physician's office has caused the cancer detection center as originally conceived to lose its popularity. Cancer: a journal of the American Cancer Society.

Contains original papers, many of them investigations aided by institutional research grants. Many of the articles are of interest to the practitioner because of the case studies, clinical features, pathology and treatment. Well illustrated.

The Cancer Bulletin. South Dakota edition. Jan.-Feb. 1954.

This issue is a report of the programs of the 39th annual clinical congress of the American College of Surgeons held in Chicago, Oct. 1953. Designed to bring from the meetings to the practicing physician the latest information available concerning cancer control. It includes a panel discussion on the diagnostic and therapeutic problems of thyroid tumors; two discussions concerning late results of surgical treatment in cancer of the esophagus; a synopsis of cancer of the male genitourinary tract including cancer of the prostate, testes and scrotum. State Journals — Special issues on cancer.

Journal of the Indiana State Medical Association, April 1954.

"The cancer issue"

Among the articles included:

Total adrenalectomy for advanced breast carcinoma by E. A. Lawrence and G. W. Irwin of the Dept. of Surgery and Internal Medicine of Indiana University School of Medicine. Brief summaries and evaluations of the histories of 10 women in which total adrenalectomy without concomitant oophorectomy had been performed.

Renal cell carcinoma by J. R. Ball and R. A. Garrett of University Dept. of Genito-Urinary Surgery. Of 17 operable cases 4 survived 10 years or longer. Clinical characteristics, management and prognosis included.

Journal of the Michigan State Medical Society, April 1954.

"Michigan strikes back at cancer"

For the general practioner the article by J. S. DeTar, "The general practioner in the cancer control program" is worth reading for the practical suggestions concerning the early detection of cancer which can be performed in the office without elaborate equipment or assistance. Other worthwhile articles are "Methods for the earlier diagnosis of gastric cancer and Cancer detection at the Yates Memorial Clinic."

Malignant diseases and its treatment by radium by Stanford Cade. Williams &

Wilkins, 1948-1952. 2d. edition. 4 vols. These 4 volumes aim to assist the radio therapist in his task; the surgeon in the selection of method of treatment; and the doctor in providing an account of the clinical and pathological aspects of malignant disease and treatment available. V. 4 published in 1952 includes malignant diseases of the skin; kidney; testes and prostate; bone and soft tissue carcoma; tumors of lymphoid tissues; the leukemias and intracranial tumors. This outstanding work may be borrowed from the University Medical Library. The journals reviewed may also be borrowed.

Esther Howard Medical Librarian

PROCEEDINGS OF HIGH BLOOD PRESSURE MEETING PUBLISHED BY AMERICAN HEART ASSOCIATION

Development in the field of high blood pressure research are described in five scientific reports of original investigative work which are included in the newly published Proceedings of the 1953 Annual Meeting of the Council for High Blood Pressure Research of the American Heart Association.

Intended primarily for internists, cardiologists, and investigators in the field of hypertension, the cloth-bound, 96-page hard cover monograph is available from (name of affiliate) Heart Association, (address), at a cost of \$2.00 a copy.

The brief reports, which deal with relations between endocrine secretions and electrolyte and fluid balance and hypertension, were presented by authorities who summarized their own recent work and the investigations of others in the field. The book complies in one convenient reference volume material which otherwise is scattered throughout the medical literature.

Contributors to the volume include Dr. R. W. Sevy, of the University of Illinois, who reports on the influences of anterior pituitary gland and the adrenal cortex on experimental hypertension; Dr. Georges M. C. Masson, of the Cleveland Clinic, who reviews an experimental series on the role of renin in experimental hypertension; and Dr. Simon Rodbard, of the Medical Research Institute at Michael Reese Hospital. Dr. Rodbard discusses salt-

water balance and body mechanisms in relation to hypertension.

The changing patterns of sodium metabolism in hypertension are described by Dr. D. M. Green, of the University of Southern California. Dr. George Perera of Columbia University, reporting on the role of metabolism in essential hypertension, discusses the possibility of a steroid, or steroid relationship, being a basic factor in the disease.

The 1953 Proceedings is the second volume in a projected series. The first volume, the Proceedings of the 1952 meeting, is still available, at a cost of \$1.75, paper-bound.

YANKTON DOCTOR SUBJECT OF FEATURE STORY

Featured in a story on flying radiologists in the American Academy of Radiology's newsletter is Dr. James P. Steele of Yankton, S. D.

The story in part, reports:

At the moment, Dr. Steele is flying a Cessna 195, a five place plane with a cruising speed of 160 miles per hour, while Dr. Dixon places his faith in a Cessna 140, which is a smaller aircraft.

"I serve two hospitals," relates Dr. Steele, "one in Tyndall, S. Dak., about 35 air miles west of Yankton, and another in Nelhigh, Neb., about 80 miles away."

"I can see more patients at home and more in the hospitals when I fly," says Dr. Steele, "because I don't take very long to get to either place."

Dr. Steele is the only radiologist in Yankton, and his closest radiological colleague is in Sioux City, Iowa, some 70 miles away.

The aerial radiological service performed by Dr. Steele is of great value not only to the hospitals in his two rural communities but to the two towns, as well.

"It brings them a qualified radiologist," he explains, "which they probably wouldn't be able to obtain otherwise — and certainly, they wouldn't get the speed in film-interpretation that they now receive."

In addition, as Dr. Steele points out, the patients will stay in their own community and patronize their own doctors and hospitals if they can have certain specialists' services available.

"My flying," says Dr. Steele, "helps keep up, I believe, standards of medical practice."

It also means good public and professional relations for medicine — and for radiology.

IN VIEWING THE VA MEDICAL PROGRAM . . .

what we are talking about...

- 1. Lack of maral or legal justification in providing federal medical care far ALL veterans
- 2. Effect of the VA program an civilian medical training pragrams
- 3. Current and eventual effects of VA pragram on civilian health standards

These seven points are the conclusions of a careful analysis by the medical profession of the current VA medical program. (1) Veterans with no serviceincurred disability should assume responsibility for their own medical care on the same basis as other citizens. (2) Medical schools and hospitals are hard pressed to train enough medical personnel for the benefit of all as long as the federal government siphons off such personnel from civilian programs. This VA practice has caused a duplication of hospital facilities and an unwarranted dispersion of health personnel. (3) The VA is creating an "artificial" shortage of medical personnel at the expense of civilian health programs. (4) Government has placed itself in competition with civilian medical programs,

4. Campetitian far health persannel and patients 5. Unsaund economics of averlapping federal medical services 6. Expanding tax-burden 7. Veterans' attitude taword VA medical pragram

both for personnel and patients, making it increasingly difficult to operate civilian hospitals efficiently and economically. (5) Although the federal government is spending millions of dollars under the Hill-Burton act in civilian hospital construction, these hospitals are hard pressed to operate at reasonable cost while in direct competition with hospitals wholly supported by the federal government. (6) The medical profession asks whether a program providing medical care to veterans with no serviceincurred disabilities is a justified burden to impose on the taxpayers of this country. (7) Physicians do not believe that a veteran who served his country wishes to be the recipient of a federal "handout" at the expense of his fellow citizen-taxpayers.

In Viewing the VA Medical Program . . .

the medical profession's policy on medical care for veterans ... to provide the highest quality for ALL VETERANS service connected: non-service connected:

The medical profession stands for the highest quality medical care for all citizens. Veterans, as citizens, should accept the responsibility for their own health needs-unless they became disabled as a result of military service; then it is the responsibility of the Veterans Administration to provide medical care and hospitalization. Because many communities do not as yet have adequate facilities to care for war veterans with non-service-connected tuberculosis or neuropsychiatric disorders, the medical profession recommends that the VA continue—on a temporary basis—to treat these patients.

In Viewing the VA Medical Program . . .

we are not talking about...

VA Form 10-P-10

Ability of veterans to pay

Efficiency of VA Administration

Extent of abuse

The medical profession is not concerned with alleged maladministration of present legislation by the Veterans Administration or with abuses by veteranapplicants of the hospital and medical care privileges. The nation's physicians do not feel that they have the responsibility to police the veterans medical care program, although they have cooperated wholeheartedly in assuring that veterans hospitalized under the present VA laws receive the highest quality of medical care.



This is your MEDICAL ASSOCIATION



Photograph by the Huron Daily Plainsman.

L. to R.: A. P. Peeke, M.D., Volga; A. W. Spiry, M.D., Mobridge; F. D. Gillis, M.D., Mitchell and G. I. W. Cottam, M.D., Sioux Falls.

☆ ☆ ☆ ☆ ☆

NEW OFFICERS ELECTED TO HEAD ASSOCIATION

Officers elected at the annual meeting of the South Dakota State Medical Association are: A. W. Spiry, M.D., Mobridge, president; F. D. Gillis, M.D., Mitchell, president-elect; A. P. Peeke, M.D., Volga, vice-president; and R. A. Buchanan, M.D., Huron, speaker of the House of Delegates. Dr. G. I. W. Cottam, Sioux Falls, continues his term of secretary-treasurer and Dr. M. M. Morrissey becomes chairman of the Council.

Committee appointments are now being completed and will be announced by letter to each appointee. Further listing will appear in the August issue of the Journal as will the minutes of the Annual Session.

CONVENTION HIGHLIGHTS

Dr. F. T. Younker, Parker, for the past three years a resident of Oregon, won the Zenith TV set which was given away as door prize at the end of the session.

Rowell Laboratories' stunt of matching numbers to win fishing equipment had everyone straining their eyes at the chests of total strangers. (This is unusual?) Our comment — bigger numbers, please.

197 members registered at the meeting along with 143 guests, exhibitors and Auxiliary members.

Exhibitors liked the Elks Ballroom facilities. Compact and readily available to conventioneers, every one seemed pleased with the arrangements.

Over 180 attended the Stag at the Huron Country Club. Many favorable comments were received on the flood and arrangements.

Success of the meeting always hinges on the work of the Medical Association office staff. The sisters Sundstrom ran things in a most acceptable manner.



Photograph by the Huron Daily Plainsman.

G. I. W. Cottam, M.D., right, Secretary-Treasurer of the Association visits with Doctor W. E. Adams, of Chicago at the Annual Session.

YANKTON DISTRICT HEARS DR. RINKLE

The Yankton District Medical Society met May 13th at the new Medical School building at the University of S. D., in Vermillion. The meeting was proceeded by a meeting at the First Congregational Church.

Dr. Herbert J. Rinkle, Kansas City, Missouri spoke on the "Diagnosis and therapy of the Food and Inhalant Allergic Individual" and Mr. Ray Olding outlined the program of the South Dakota Heart Association.

SEVENTH DISTRICT MEETS MAY 4

The Seventh District Medical Society met May 4th at the Cottage in Sioux Falls to

hear a discussion by Drs. Kay Burns and E. R. Marsh of the Veterans Administration Sioux Falls on the "Haberer Gastrectomy with Vagotomy." About fifty docors attended the meeting. After the scientific session was completed, the group held a business session to instruct their delegates to the state meeting.

GALL BLADDER SURGERY IS BENGEMAN SUBJECT

The Aberdeen District Medical Society held its regular monthly meeting on Wednesday evening, May 5, with a dinner in the banquet room of the Capital Cafe. Routine business matters were discussed and the scien-

tific program consisted of a talk on "Gall Bladder Diseases With Special Attention to the Surgical Aspects" by Dr. Edwin Bengeman of Minneapolis, Minnesota.

NEWS NOTES

The Aberdeen District Society has accepted three new members, Alvin Scheffel, M.D., Redfield; Karlis Zvejnieks, M.D., Hośmer; and Rainis Berzins, M.D., Bowdle.

A clinic workshop on remedial speech was held at South Dakota State College from June 7th and continuing until June 25th. Drs. J. B. Gregg, W. H. Patt functioned on the staff.

Transactions of the American Ophthalmological Society (1953) are available for \$18.00 from Columbia University Press, New York 27, New York. (791 pages)

April and May were heaviest months in nurse recruiting activities. T.V. poster, radio, newspaper, and magazine publicity hit a new high in this field in May.

PHYSICAL THERAPISTS DRAFT LICENSE LAW

The South Dakota Physical Therapy Association met in Pierre, May 1st to complete wording of a proposed law to license physical therapists.

Meeting with the group were: Karl Goldsmith, attorney for the State Medical Association and John C. Foster, its executive secretary.

The proposals have been submitted to the Council of the State Medical Association for its approval.

MEDICAL SCHOOL FINDS ORIENTATION PROGRAM VALUABLE

An orientation program for entering medical students, seldom used by medical colleges despite the success of such programs at the undergraduate level, was found to be "of great value" when tried at the State University of New York at Syracuse. Dr. Davis G. Johnson, assistant dean for student personnel, describes the program and the student response in the May issue of The Journal of MEDICAL EDUCA-TION.

The Syracuse program featured a "senior guide," who was assigned to write letters of welcome to three freshmen during the summer preceding their entrance to the school. Later this senior "big brother" was on hand to accompany his guides through registration, receptions and a tour of the school.

In addition, lectures were given on the history of the school and an introductory clinic was held which emphasized the need for basic sciences as background for clinical training. A luncheon for the freshmen and senior guides closed the program.

When the students, both freshmen and senior, who participated were asked their opinion, the answers were 95 per cent favorable. According to Dr. Johnson, this should encourage other medical schools to initiate such an orientation program.

A typical response was, "The program was of great value in helping us overcome our feeling of strangeness. It also made us aware of our

goals for the next four years. Moreover, it gave us the feeling that the faculty is really concerned with our welfare."

Dr. Johnson suggests that the medical schools as a group might take a systematic survey of their orientation practices, and summarize the findings with a view toward helping their students get off to the best possible start in their medical training.

HEART CONGRESS TO WASHINGTON

Physicians and research scientists from many nations will join their United States colleagues in Washington, D. C., next September 12 through 17 for a combined meeting of the Second World Congress of Cardiology and the Twenty-Seventh Scientific Sessions of the American Heart Association. This will be the first international medical gathering of its kind ever held in the United States.

Opening ceremonies on September 12 will include addresses by leading figures in government and the medical profession. This will be followed by five days of intensive scientific discussion in one of the most comprehensive programs relating to heart and blood vessel diseases ever presented. Round table conferences at the Congress will deal with such subjects as high blood pressure, congenital heart disease, hardening of the arteries, electro-cardiography and the preventive aspects of heart disease.

Any physician who is interested may attend the

Congress by filling out and sending in the application blank and paying the required registration fee of \$25.00, which entitles members to attend all scientific sessions, the opening reception, formal banquet and other social events planned for Congress delegates, the exhibits and special sightseeing tour to medical installations in Washington and its environs. Detailed information concerning the Congress is available from the Secretary-General, L. W. Gorham, M.D., Second World Congress of Cardiology, c/o American Heart Association. 44 East 23rd Street, New York 10.

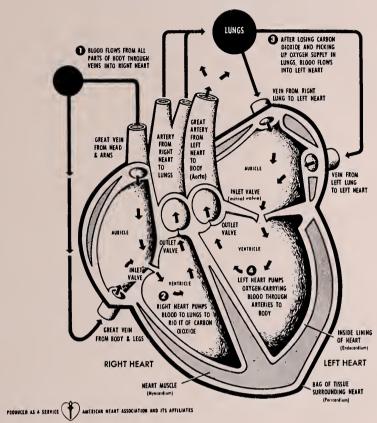
GERIATRICS GROUP SET FOR JUNE S. F. MEETING

Various phases of the clinical problems of aging will be covered at the eleventh annual meeting of the American Geriatrics Society. The sessions will be held in San Francisco, June 17-19, with headquarters at the Fairmont Hotel.

Scientific programs are open to all members of the medical profession and to those interested in the problems of aging. Panel discussions will cover recent developments in cardiology, the relation of industry to geriatrics and methods of determining operability in older patients.

Salvatore P. Lucia, M.D., professor medicine, University of California Medical School will deliver the address at the annual dinner meeting Friday, June 18. His topic will be Balm of the Autumnal Years.

YOUR HEART AND HOW IT WORKS



Your heart weighs well under a pound and is only a little larger than your fist, but it is a powerful, long working, hard working organ. Its job is to pump blood to all the body tissues.

The heart is a hollow organ. Its tough, muscular wall (myocardium) rests in a fiber-like bag (pericardium) and is lined by a thin, strong membrane (endocardium). A wall divides the heart cavity down the middle into a "right heart" and a "left heart." And each side of the heart is divided again into an upper chamber (auricle) and a lower chamber (ventricle) with valves to regulate the flow of blood.

The heart, then, is really a double pump. One pump (the right heart) receives blood from the body and pumps it through the lungs where it gets rid of a waste gas (carbon dioxide) and picks up a fresh supply of oxygen. The second pump (the left heart) receives this "reconditioned" blood from the lungs and pumps it out through the great trunk-artery (aorta) to be distributed by smaller arteries to all parts of the body.

(Copies of heart diagram available without cost to doctors and nurses. S. Dak. Heart Ass'n, 302 First Nat'l Bank Bldg., Sioux Falls.)



YOUR STAKE IN PHARMACY'S FUTURE*

Ву

Robert E. Abrams, Executive Secretary American College of Apothecaries Instructor in Pharmacy, Philadelphia College of Pharmacy and Science

Although many of us have a tendency to complain and question the future of pharmacy, if we would stop and reconsider a second, I believe all of us would have to admit that our dedication to our profession has been gratifying. From this dedication we have derived a great deal of personal satisfaction as well as a degree of economic security. If this was not a fact, I seriously doubt if you would be present today. However, as a practitioner of the profession of pharmacy, you are in a most important era for, with certainty, the future of pharmacy will be decided within the next five or ten years. You, as pharmacists, have a decided stake in "Pharmacy's Future."

A great deal of time and editorial words have been spent discussing such critical subjects as Product Duplication, Substitution, Inadequate Margins and many other so called vital problems, with only a very casual reference to a most vital problem -- that of Public Relations. Without the respect and confidence of our patients or customers, how can pharmacy advance? We are familiar with the biblical quotation, "What does it profit a man if he gain the whole world and suffer the loss of his own soul?" I firmly believe that the soul of our profession is the esteem with which the public and our sister professions hold for pharmacy. Without this soul, pharmacy cannot continue to progress.

* Presented at the Convention, GEORGIA PHAR-MACEUTICAL ASSOCIATION, April 20, 1954.

Public Relations is every pharmacists' responsibility, his own individual responsibility, and like charity it begins at home. Since we are banded together in a profession, we are our Brother's Keeper Anything accomplished, whether satisfactorily or otherwise, reflects back on all of us and, unfortunately, we are judged not by the best, but by the worst, as far as public relations is concerned. Up to the present time, we in pharmacy have done an extremely poor job, public relations-wise. As retailers and as manufacturers, we have failed, and failed miserably I might add, to convey the story of the many contributions that pharmacy as a profession has made in keeping the American Public healthy.

Professional pharmacy and the pharmaceutical industry have a great story to tell. We have conquered such dread diseases as yellow fever, cholera, the plague and smallpox. The occurrence of diphtheria, scarlet fever, typhoid fever, and rickets, the latter a disease at one time so prevalent here in the south, are indeed rare.

As recently as ten years ago, Rocky Mountain Spotted Fever killed as many as fifty per cent of those who were bitten by an infected tick and who contracted the disease. Today, this deadly infection can be quickly cured with a few broad spectrum antibiotic capsules. The devastating consequences of syphilis and gonorrhea are now preventable and disappearing thanks to penicillin and

other antibiotics. A patient with these diseases can now be rendered non-infectious in a matter of hours and cured in a few days or weeks with drugs now being made available by pharmacy.

Our second greatest killer of fifty years ago - lobar pneumonia - which alone was responsible for 152 deaths per 100,000 population has now been so affected by the new drugs that the rate has declined to 12 per 100,000. Similarly, deaths from tuberculosis are now 22, whereas in 1900 they were 195 per 100,000. With the strides made in the treatment of tuberculosis today, we even hope to reduce this rate materially. Forty years ago one of every four patients subjected to a major operation died; whereas today only 1 in 100 succumbs including all patients, young and old. We can cite many other examples which would equally show how, through the combined efforts of pharmacy and medicine, many of the diseases of the good old days have virtually been eliminated. Unlike the price of butter, eggs and coffee the quality and quantity of medical care today are much better than they were back in the good old davs.

Today the American Public is living longer thanks to our health professions. A child born in 1900 could hope to live about 44 years. Today the average life expectancy of each of the over 4 million babies in 1953 is almost 70 years, or over 20 years of useful life, per baby, has been added to the productive resources of our country in a short span of 50 years. Even the dread disease polio may respond to pharmaceutical and medical research since there is hope that the present vaccine or other vaccines, which may be developed, will greatly reduce the incidence and hazards of this dread disease.

There is no question in my mind that our primary failure in getting these truths and facts over to the public has been due to a lack of an intelligent approach on the part of the pharmaceutical industry. They, above all, were in the position to promote, design and finance the type program pharmacy needed and either through omission or commission such a program has not appeared on the scene.

Pharmacists themselves are not blameless. Instead of bringing these facts home to the public in a definitive manner, they have been satisfied to treat complaints with a shrug of the shoulders and pass the blame of so-called high prices on to the manufacturers.

How many of us have been confronted with this statement when a somewhat higher priced prescription is presented to a patient, "What's in this gold or platinum?" How would you answer this? By saying the manufacturer sets the price?

Reflect on this question a minute. Is it not indicative of how little value we place on things which are in effect priceless? For actually if the prescription was of gold or platinum, it would be valueless to the patient at that time. Ten years ago no amount of gold or platinum could buy some of the modern pharmaceutical products available today — products which have been directly responsible for prolonging the lives of the American Public and making these lives healthier and happier.

Who can place a value on the few antibiotic capsules that can control a case of pneumonia today without worry and danger, the hormones that have allowed arthritics, who were permanently disabled, to again live useful lives, the insulin which now allows the diabetic to live a healthy, normal life and many, many others? Are they not more precious than gold? The purest gold and the finest platinum cannot provide the health that these drugs insure.

Since we are discussing the subject of finances, what about the cost of medical care? Today, there is a great misconception that the cost of medical care has increased. Discounting the elimination of many diseases, the shorter duration of others and the reduction of the crippling effects and permanent damage that was once prevalent, medical care in most cases compared with our present economic status has not increased.

In 1929, the American Public spent slightly over 3½ billion dollars for medical care or approximately 4.1% of the income of the country. In 1951, the total medical care bill was about 9 billion or approximately 4.3% of the national income. In 1929, physicians received 31.8 cents of each medical care dollar spent. Today they only receive 28 cents. In 1929, out of each medical care dollar 19.5 cents went for drugs and sundry items. Today only 17 cents of the medical care dollar goes toward paying for drugs and sundry

items.

Yet we are continually told drug costs are high and we believe it. Let's look at some other interesting figures. In 1952, according to the U. S. Department of Commerce, each person in the United States spent the following amounts for various services and commodities:

Alcoholic Beverages	\$55.
Tobacco Products	\$32.
Auto Repairs and Maintenance	\$11.
Amusements	\$10.
Drugs and Sundries	\$10.

Is our alcohol more important than our bodies?

Medical costs are not high What appears to be expensive is the vastly improved care and comfort which is taken for granted by even the poorest of us, but 20 years ago was not available to the wealthiest. Since sickness is a condition which none of us request and usually none of us make adjustments for in our budget, complaints will frequently arise. However, it is the responsibility of each one of us, no matter which phase of the profession he might be in, to answer these complaints, not to answer them with vague or unacceptable explanations but to answer them with the true and basic facts.

What can you as individual pharmacists do, you might ask? It is upon you that the whole problem rests. You are the link with the public and it is you who must serve as a foundation for improved public relations. The public is interested in Health today but the cost of medical care has been exaggerated into a problem which has succeeded in instilling an element of question in the minds of a number of people. This extreme interest in Public Health is being somewhat exploited by a number of newspapers and magazines. We as a profession must constantly be alert to make certain that the public is appraised of the true facts on our contributions. As I witness the facts, we must first rid ourselves of this inferior and lethargic attitude so prevalent in our ranks. We must put our best foot forward and have our stores and ourselves assume an air of professional dignity. The public will not think any more of us than we think of ourselves. Therefore, it is your responsibility to:

1. Keep abreast with the advances of pharmacy and pharmaceutical research so that

- these can immediately be made available to the public.
- 2. Assume an active role in pharmaceutical and civic organizations.
- 3. Live by the highest ethical standards of the pharmaceutical profession.
- 4. Assist in educating the public about the socio-economic as well as the scientific side of pharmacy.

You may ask, "But what does economics have to do with Public Relations?" There are two sides to the practice of pharmacy—the scientific side and the business side. Being proficient in each is extremely important. Poor business practices are often at the bottom of patients' complaints about medical care and its practitioners. Your own financial well-being is closely tied in with your ability to create good public relations. Financial pressures will undermine pharmacy's ability to provide excellent pharmaceutical services and thus adversely effect our public relations.

Remember that efficiency in economic matters is to the best interest of both you and your patient. You will serve your patients effectively and efficiently by running your business correctly and making a realistic modest profit. It is unquestionably wrong to overcharge for services but it is equally as wrong and dangerous to charge too little. The fair price is best. Most people are not looking for bargains in medicine. The average person is willing to pay a fair price for good pharmaceutical service and a fair price must be one which is equally fair to the patient and to yourself.

Through your pharmaceutical organization you will be given an opportunity to participate in public relations' projects. These activities are not publicity stunts but public service projects which benefit the public. Participation in public health campaigns is a primary example. The people in a community expect the pharmacist to assume his civic responsibilities. They want his advice on a variety of community problems. All of us are not experts in all community problems, but we can contribute our time along a particular community project in which we are interested.

We have a most interesting story to tell and we must get out and tell it. It is a dramatic and dynamic story — one which is continually changing. When we stop to realize that 60 per cent of the prescriptions being compounded today were unknown 5 years ago while over 80 per cent were unknown 10 years ago, we see how dynamic a profession we are in. This search for progress has not stopped. It is estimated that in 1954, well over 250 million dollars will be spent for medical research in this country. More progress must be made.

Is there a source where you can obtain material to help you tell this story? There are many sources. Your journals offer a wealth of ideas and your associations have programs begging for cooperation. We in the American College of Apothecaries have inaugurated a program open to all pharmacists, in which we provide subscribers each month with a placard to place on their counters, inserts which can be mailed to their physicians and customers, as well as prescription stuffers which are wrapped with each prescription. In addition, each month we provide a short

article which the pharmacist can use in addressing various civic groups. At the present time the program is four months old and we estimate we are reaching over 4 million people.

Thus, I trust that I have left you the fact that Public Relations is everyone's job, yours and mine, the wholesaler, the teacher, the manufacturer, the hospital pharmacist, pharmaceutical organizations, but more important it is the individual retailer's job. The road ahead is not easy. We have a story that needs telling and we must tell it. The value of the pharmacist's professional services must be explained and proven beyond a doubt for the future of pharmacy is at stake. Accept the challenge as individual pharmacists, for you have a most important stake in that future. Remember - "The only person who can afford to be asleep at the switch is the man who sleeps under an electric blanket."

DIVISION OF PHARMACY NEWS

Dean LeBlanc to Attend Seminar

Walgreen Drug Stores recently announced that Dean Floyd J. LeBlanc, Division of Pharmacy, South Dakota State College, has been selected to attend the Seminar in Drug Store Management held at the general offices of the company in Chicago, June 21 to July 15. Dean LeBlanc is one of twelve representatives of Colleges of Pharmacy selected on a nationwide basis to attend this seminar.

The four-week program of the Seminar is divided into thirty units dealing with various phases of Drug Store Management, including, store planning, merchandising, insurance, professional services, advertising, inventory control, employee and public relations. Several field trips are also included in the program.

The Seminar is a contribution of the Walgreen Drug Company to provide additional up-to-date information to instructors teaching pharmaceutical administration in colleges of pharmacy. The exchange of information and ideas between faculty members and Walgreen executives is mutually helpful and stimulating and results in better-trained college of pharmacy graduates.

A.Ph.A. Elects — Ivan Madsen, Tyler, Minnesota, was elected president of the State College Student Branch of the American Pharmaceutical Association at the regular monthly business meeting, April 21. Other officers elected were: Vice-President, Leon Pfotenhauer, Pierre; Treasurer, Ronald Harrison, Milbank; and Mary Ann Peterson, Mitchell, Secretary.

During the business session, the members went on record approving the formation of a special student section at the National Convention of the A.Ph.A. Plans for the 1954 Hobo Day float were also discussed.

Rho Chi Officers Named — State College Chapter of the Rho Chi Honorary Pharmaceutical Society elected officers for 1954-55 at a meeting, April 28. Richard Angerhofer, Milbank, was elected President. Other student officers are Vice-President, Floyd Bly, Brookings; Secretary-Treasurer, Sheldon Murphy, Forestburg; and Historian, Marlin Radtke, Faribault, Minnesota.

Dr. Guilford C. Gross was elected delegate from Tau Chapter to the National Convention to be held in Boston during August.



Pharmacy Dinner Dance Well Attended

The Twentieth Annual Pharmacy Dinner Dance held in the Union Ballroom, April 24, was attended by over 70 couples who dined and then danced to the music of Jimmy Thomas and his orchestra.

As in the past, favors for the dance were donated by pharmaceutical manufacturing organizations.

President and Mrs. John Headley and Vice-President and Mrs. Harold M. Crothers were honored guests.

SDSC Student Gets Purdue Assistantship

Gerald Zins, senior pharmacy student at South Dakota State College from Nicollet, Minn., has accepted an assistantship at the Purdue University School of Pharmacy.

Zins will major in pharmacology while working for a doctor's degree at Purdue. His assistantship is for \$1,500 for ten months.

At State College he is a member of Rho Chi, pharmaceutical honor society; Phi Kappa Phi, honorary scholastic society; Blue Key, senior men's service organization; Monogram club; and board of control.

DRUG EXCHANGE DEPARTMENT

The drug exchange department will list those items which you no longer have call for and would like to exchange. Pharmacists who receive prescriptions for any item listed may then render a helping hand by arranging to exchange or purchase the product.

Listings may be sent to H. S. Bailey, Box 675, College Station, S. Dak. any time up to the tenth of the month for publication in theJournal of the following month.

Buffalo Drug Store, Buffalo, S. Dak.

- 6 12's Westhiazole Vaginal
- 12 Testronvl Insufflettes
- 2 Tetronyl Jelly
- 3 pints Bepron Fortified
- 6 12's Picragol Suppositories
- 3 100 Calcidin tablets 1 gr. Abbott
- 2 100 Calcidin tablets 3 gr.
- 250 Dioloxol tablets

NEW HOPE in the battle against

CANCER

THE FIGHT against man's cruelest enemy is far from won. If present rates continue, 23 million living Americans will die of cancer-230,000 this year. And thousands of these will die needlesslythrough cancer that could have been cured if treated in time.

ALL THE SAME, there have been victories. Thousands who once would have died are being saved-thanks, in part, to your donations to the American Cancer Society.

AND, LAST YEAR, the Society was able to allocate \$5,000,000 of your donations to research aimed at finding the ultimate cure for all cancer. That's more money than ever before.

MUCH MORE, of course, remains to be done. So please make this year's gift a really generous one!



Cancer MAN'S CRUELEST ENEMY Strike back-Give AMERICAN CANCER SOCIETY



Indon - A New Tablet Form Anticoagulant

Parke, Davis & Company has introduced a new tablet form anticoagulant for treatment of such conditions as thrombo-embolic disease, both real and threatened.

The new drug — called Indon — is effective orally and gives a more rapid onset of therapy for a shorter duration of action than "Dicumarol."

Dosage schedule for Indon is six to eight tablets initially, followed in the next 24 hours by six tablets in divided doses. Dosage should be governed by prothrombin determinations (quick method). For maintainance, one to four tablets daily in two divided doses is usually sufficient.

"Since use of heparin and of 'Dicumarol' has become wide-spread in treatment of patients with various thrombo-embolic manifestations, certain deficiencies in action of these two substances have stimulated continued search for drugs of similar activity which will retain advantages but avoid some disadvantages of these products," Parke-Davis stated.

"Indon is such a compound with its action lying somewhere between those of heparin and 'Dicumarol'."

A Canadian medical journal report said that phenylindandione was used in a controlled study on 20 patients and proved to be a safe drug which acts in about one-half the time as "Dicumarol" and is rapidly catabolized.

The Northwestern University Medical School reported in its Quarterly Bulletin that phenylindandione therapy brought the prothrombin level desired in 22 patients within 24 hours, and, in all patients in the series, the lowered level was reached within 48 hours.

Each Indon tablet is grooved, contains 50 mg. of phenyliandandione (2-phenyl-1, 3-indandione) and comes in bottles of 100.

Bardase

What it is:

Bardase combines three active ingredients in one tablet: extract belladonna, 1/6 gr.; phenobarbital, ¼ gr.; and Taka-Diastase, 2½ gr. Bardase is a yellow, sugar-coated tablet supplied in bottles of 100 and 1,000 by Parke-Davis & Company.

What it does:

Bardase offers anticholinergic, sedative, and enzymatic effects: extract belladonna decreases secretory activity of the stomach and motor activity of both stomach and intestinal tract; phenobarbital blocks nervous impulses moving from brain to stomach; Taka-Diastase, starch-digesting enzyme active at a pH of 3.0 to 6.0, predigests starches before they reach the small intestine.

What it's for:

Bardase is useful in relieving and managing visceral and smooth muscle spasm as in irritable colon, ulcerative colitis, peptic ulcer, genitourinary disturbances, and dysmenorrhea.

How it's used:

Bardase is used in a dosage of 1 or 2 tablets three times daily, varied by the physician according to the patient's condition. Contraindicated in patients hypersensitive to barbiturates or having verified or suspected glaucoma. Use with caution in patients with significant gastric retention or with evidence of pyloric obstruction.

Duotrone Oral and Injectable

Description:

Each oral or buccal tablet contains: (No. 5) methyltestosterone, 5.0 mg.; ethinyl estradiol,

0.02 mg.; (No. 10) methyltestosterone, 10.0 mg.; ethinyl estradiol, 0.04 mg. The injection contains 2.2 mg. of estrogenic substance to every 25.0 mg. of testosterone.

Indications:

To supply balanced estrogenic and androgenic activity.

Administration:

Menopausal symptoms — 2 to 4 No. 5 tablets or 1 to 2 No. 10 tablets daily; 0.5 cc. of the injection twice weekly is equivalent to one No. 10 buccal tablet daily. Osteoporosis and in geriatrics — 1 to 2 No. 5 tablets daily.

Form supplied:

Tablets — bottles of 30 and 100; injection — 10-cc. vial.

Source:

U. S. Standard Products Co., Woodworth, Wis

Elixir Gerix (Geriatric Elixir)

Description:

A wine-flavored, appetite stimulant and nutritional supplement.

Indications:

Provides balanced amounts of important nutritional elements including the B-complex factors and iron. It contains 20% alcohol. Taken before meals, Gerix acts as a stomachic, increasing the desire for food.

Administration:

One tablesponful (15 cc.) twice daily, preferably before meals.

Form supplied:

Pint and gallon bottles.

Source:

Abbott Laboratories, North Chicago, Ill.

Sucaryl Calcium Sweetener Powder — New

Dosage Form

In addition to liquid and tablet Sucaryl, Abbott Laboratories, Inc., is now offering Sucaryl Calcium Sweetener in powder form for persons who follow low-salt as well as low-sugar diets. Packaged in a 2-oz., sifter-top container, with moisture and leak-proof polyethylene cap.

Attend Your Convention - Aberdeen June 20-21-22 Make Your Reservations Now

A MEMORANDUM TO ATTORNEY GENERAL'S NATIONAL COMMITTEE TO STUDY THE ANTITRUST LAWS

by

The Bureau of Education on Fair Trade*

The subject of fair trade has been examined over a long period of years by many persons and groups. As far back as 1913, Louis D. Brandeis, later Mr. Justice Brandeis, set forth the economic, social and legal principles upon which fair trade rests.

Laws embracing these principles have been enacted by 45 legislatures, and enabling acts have twice been voted by Congress. It has been reviewed by many courts, including the Supreme Court.

The Bureau of Education on Fair Trade appreciates that a large body of fact and opinion concerning fair trade is available. It respectfully submits this memorandum to the Attorney General's National Committee to study the Antitrust Laws in order briefly to restate certain aspects of the subject.

Fair Trade and Resale Price Maintenance

Fair trade permits the manufacturer to establish, under specified circumstances, the resale price of his trade-marked product. It is not the only legal sanction which resale price maintenance has in this country. The manufacturer may also legally establish the resale price of his product when

- 1. He sells direct to consumers through (a) his own retail stores; (b) leased departments in stores owned by others; (c) his own salesmen, as in door-to-door selling; (d) direct mail.
- 2. He exercises his right to refuse, under the authority of the Supreme Court's decision in the Colgate case (1919), to sell to dealers who do not follow suggested resale prices.
- 3. He sells through a sales agency, thus retaining title to his product until sold to final users.
- The Bureau is a non-profit organization, established under the auspices of the National Association of Retail Druggists. Its purpose is to develop public understanding and support of fair trade as an instrument of state and national policy. Its Steering Committee includes manufacturers, wholesalers and retailers. It has a National Advisory Committee consisting of representatives of 26 national trade associations.

- 4. He sells on consignment, likewise retaining title to his product until sold to final users.
- 5. He sells through independent dealers to whom he has granted exclusive dealerships.

In every case cited above, the manufacturer exercises control over the price at which his product is to be sold to the ultimate consumer. The fair trade laws permit the manufacturer to enjoy the same right. They are, however, unique in that they require a product to be in free and open competition with articles of similar class produced by others. No other legal basis for resale price maintenance imposes this requirement. No other basis protects the consumer as well. We respectfully suggest that he who condemns fair trade because it exempts resale price maintenance contracts from the antitrust laws must, as a matter of doctrinal consistency, condemn every other legal sanction for resale price maintenance.

Stereotype of the Fair Trade Supporter

The fair trade supporter has been described as a pathetic bumbling inefficient retailer, who operates a store more as a way of life than as a business enterprise. Manufacturers have been pictured as fair-trading their products only in response to retailer pressures. As President Eisenhower pointed out in another context, there is a grain of truth in both these descriptions — but only a grain.

We believe that fair trade has the whole-hearted support of more than 90 per cent of the American retail community. Its retail advocates include admittedly efficient operators who support the free enterprise system, as they understand it, as strongly as do the members of the Attorney General's Committee. They include a substantial majority of the department stores, chains, and supermarkets, as well as the rank and file of retailers from the northernmost part of Maine to the southern tip of California.

Resale price maintenance is a keystone of business operation of many thousands of manufacturers, from the great automobile companies to the little dress manufacturer on Seventh Avenue, who contribute to the strength of our economy. They are not dragooned into resale price maintenance by their distributors. Rather, they turn to it in order to protect two of their precious assets: their trademarks which symbolize their good will, and their systems of distribution which enable them to mass produce for the mass market. These manufacturers know from bitter experience in the marketplace that the welfare of their business is imperiled when retailers appropriate for their own purposes, and in their own ways, the good will which the manufacturers have developed for their products. We estimate that more than \$40 billions of retail sales per year are accounted for by resale price maintenance. Threequarters of this sum represent resale price maintenance without recourse to fair trade, only one-quarter is accounted for by fair trade.

Fair Trade and "Price Fixing"

Those who oppose fair trade and, presumably, resale price maintenance by whatever legal sanction, characterize it as permitting "price-fixing" by private parties. fixing" has an opprobrious connotation because it is associated with the establishment of price by the seller in the absence of competition because of conspiracy or other illegal restraint of trade. The question which fair trade poses is not, we submit, one of "pricefixing," per se. Most of the prices we pay are fixed in the sense that they are established by the seller without prior negotiation with the prospective buyer. This unilateral "fixing" of price by distributor, as well as producer, is not accomplished in an economic vacuum. The price reflects diverse and manifold facts and represents the distributor's, or the manufacturer's, resolution of these factors. The prospective buyer is not a party to this unilateral "price-fixing," but he nevertheless retains veto power over the seller's price to the extent that he has freedom of choice as between competing articles in the marketplace.

Fair trade gives the buyer unparalleled freedom of choice as between competing articles, as the shelves of any retail establishment will attest. The buyer will find at least 58 brands of sterling silverware, 56 of face

powder, 76 of toilet soap, 31 of washing machines, 21 of electric toasters, 39 of electric irons, 45 of cold cream, 67 of floor waxes. The shopper can choose from 93 brands of dentifrices, ranging in price from 4c to 28c per ounce. As Mr. Brandeis noted: "The independent producer is engaged in a business open to competition. He establishes the price at his peril — the peril that, if he sets it too high, either the consumer will not buy, or, if the article is nevertheless popular, the high profits will invite even more competition. The consumer who pays the price established by an independent producer in a competitive line does so voluntarily; he pays the price asked, because he deems the article worth that price as compared with the cost of competing articles . . ."

The retailer, too, "fixes" prices (except that in the case of articles subject to resale price maintenance his price cannot be below the maintained price). He "fixes" prices exclusively in the light of his interest, not in that of the manufacturer or the community or the economy. He does not "fix" prices on the basis of a uniform store-wide mark-up. While his mark-up may be substantially lower on some articles than his average requirement, they will be substantially higher on other articles. Nor does he pass on to one customer the savings he realized because the customer happened to be a quick buyer; nor does he increase the price to another customer to reflect his higher costs because of longer selling time.

If the retailer operates a chain, he "fixes" prices so that they are uniform in all his outlets, regardless of their varying operating efficiency. He surely "fixes" the prices of his private brands. Moreover, if he distributes these private brands through other retailers as well, he imposes resale price maintenance on these other retailers for the simple reason that he cannot afford to compete with himself.

Fair Trade and Consumer Cost

There has not been a single survey purporting to prove that fair trade makes for high prices which would stand up, scientifically, as valid statistical price evidence. So-called "surveys" have been made. They consist of purchasing certain selected items in certain selected stores at certain selected times. Gathering price data in this way proves only

one thing, namely, that "loss-leader" selling exists. No effort was made to shop the highly selected stores for their highest margin merchandise. No effort was made to obtain figures showing each store's over-all margin for any given year. No effort was made to analyze prices, over-all, in comparable stores in the fair trade and non-fair trade areas of the country. Had these things been done, in our judgment, the more careful studies would have revealed that shoppers who bought bargains were being subsidized by the other customers of the stores selected for the shopping tour. The pick-and-choose "survey," in our judgment, do not prove that consumers in the non-fair trade areas save a single penny on their yearly shopping bills, nor that any store in the United States charges a penny less, on their over-all inventory, where resale price maintenance does not exist.

The Bureau of Education on Fair Trade has itself caused certain price studies to be made. Two were conducted by A. C. Nielsen & Company, the world's largest independent market research agency. Nielsen conducted two country-wide six-month's surveys of actual selling prices, in the fair trade and nonfair trade areas of the country, of a list of the leading drug products and toilet goods. These surveys showed that, on the average, consumers paid less for these products in the fair trade areas than in the non-fair trade areas.

We have more recently analyzed the Consumer Price Index of the U. S. Bureau of Labor Statistics. Our findings have not yetbeen published, but we believe they disclose not the slightest scintilla of evidence to justify any assertion that fair trade has increased the cost of living in any area in the United States.

The "Non-Signer" Clause

The non-signer clause, which appears in every one of the 45 State fair trade acts and in the McGuire Act, is the heart of fair trade.

In sustaining the constitutionality of the State fair trade laws in 1936, the U. S. Supreme Court carefully considered, and approved, the non-signer clause. The Court said:

"It is first to be observed that section 2 reaches not the mere advertising, offering for sale, or selling at less than the stipulated price, but the doing of any of these things

willfully and knowingly. We are not called upon to determine the case of one who has made his purchase in ignorance of the contractual restriction upon the selling price, but of a purchaser who has had definite information respecting such contractual restriction and who, with such knowledge, nevertheless proceeds willfully to resell in disregard of it.

"In the second place, section 2 does not deal with the restriction upon the sale of the commodity qua commodity, but with that restriction because the commodity is identified by trademark, brand or name of the producer or owner. The essence of the statutory violation then consists not in the bare disposition of the commodity, but in a forbidden use of the trademark, brand, or name in accomplishing such disposition. The primary aim of the law is to protect the property—namely, the good will — of the producer, which he still owns. The price restriction is adopted as an appropriate means to that perfectly legitimate end, and not as an end in itself.

"Appellants here acquired the commodity in question with full knowledge of the then existing restriction in respect of price which the producer and wholesale dealer had imposed, and, of course, with presumptive if not actual knowledge of the law which authorized the restriction. Appellants were not obliged to buy; and their voluntary acquisition of the property with such knowledge carried with it, upon every principle of fair dealing, as sent to the protective restriction, with consequent liability under Section 2 of the law by which such acquisition was conditioned."

The phrase, "non-signer," does not accurately reflect the scope, purpose and plan of the State fair trade laws. Every State fair trade act establishes and enunciates a State policy of unfair competition intended to apply to all. Action cannot be taken under the law against those who are unaware of the restriction imposed by fair trade contracts. To all others, the State policy is intended to apply. It applies, obviously, to signers because they assuredly have full knowledge of the contract and of its terms. And it applies to those who have not signed the contract if, and only if, they have similar knowledge. In short, the fair trade laws deal with State systems of fair competition. The fair trade contract is not the system; it merely makes the system

operative insofar as the product it covers is concerned.

A full exposition of the non-signer clause was made in the House of Representatives by Rep. Chet Holifield of California in the course of debate on the McGuire Bill. It can be found in The Congressional Record, May 7, 1952, pages 4995 to 4997.

SUMMARY

The economic and social consequences of fair trade, or of its absence, require that the subject be thoroughly examined before it is judged. The issues which is raises involve the kind of competition we want in our society, as well as the role of trademarks and advertising in the distribution and pricing of consumer goods. These questions cannot be resolved by unsupported generalizations, however sincerely made. They should be resolved, we submit, through a factual, unprejudiced evaluations of the state tion of fair trade rather than through easy pre-conceptions, convenient but inaccurate labels or emotional reaction.

Mr. Justice Holmes and Mr. Justice Brandeis were no less ardent in their suport of a competitive system and in their opposition to monopoly than we

Americans today.

Said Mr. Justice Holmes in 1911:
"I cannot believe that in the long run the public will profit by this court permitting knaves to cut reasonable prices for some ulterior purpose of their own and thus to impair, if not to destroy, the production or articles which . . . the public should be able to get.

Mr. Brandeis observed:
"The position of the independent producer who "The position of the independent producer who establishes the price at which his own trademarked article shall be sold to the consumer must not be confused with that of a combination or trust which, controlling the market, fixes the price of a staple article... The competion attained by prohibiting the producer of a trademarked article from maintaining his established price offers nothing substantial. Such competition is superficial merely. It is sporadic, temporary, delusive. It fails to protect the public where protection is needed. It is powerless to prevent the trust from fixing extortionate prices for its product. The great corporation with ample capital, a perfected organization, and a large volume of business can establish its own agencies or sell direct to the consumer, and its own agencies or sell direct to the consumer, and is own agencies or sell direct to the consumer, and is in no danger of having its business destroyed by price-cutting among retailers. But the prohibition of price maintenance imposes upon the small and independent producer a serious handicap . . . "Already the displacement of the small business man presents a grave danger to our democracy. The social loss is great; and there is no economic gain Shall we under the guise of protecting com-

. . . Shall we under the guise of protecting competition further foster monopoly by creating immunity for the price-cutters?

"America should be under no illusions as to the

value or effect of price-cutting. It has been a most potent weapon of monopoly — a means of killing the small rival to which the great trusts have resorted most frequently. It is so simple, so effective. Far-seeing organized capital secures by this

means the cooperation of the short-sighted unorganized consumer to his own undoing. Thoughtless or weak, he yields to the temptation of trifling immediate gain, and selling his birthright for a mess of pottage, becomes himself an instrument of monopoly.'

We associate ourselves with these views. We think they add up to good economics and good laws

and, therefore, to social justice.

ERADICATION OF TUBERCULOSIS-

(Continued from Page 175)

tuberculosis and health association. It consists of representatives of these groups setting up qualifications and as counties meet them they are issued official certificates of accreditation for display in public places.

Eradication of tuberculosis is now accomplishable in the sense that the last tubercle bacillus can be tracked down and ultimately destroyed. The medical profession should assume the leadership and work in harmony with all other organizations including the state board of health, tuberculosis and health associations, dental associations, nursing organizations, veterinary associations, educators, religious groups and the entire citizenry of the state. This is a long term project but with patient and persistent effort ultimate victory is assured.

DAKOTA MEDICINE MEN-

(Continued from Page 178)

Memorial Building. My plea has been directed not only to the medical students present. but also, across their shoulders, to the teachers of this University who establish the ideals and set the standards the students will live by; to the citizens and practitioners of this State who, through their encouragement and support and example can make the training of doctors and the practice of medicine better; and finally to the wives and sweethearts who, through their devotion, understanding, and tremendous sacrifice can, and I predict, will supply the environment in which a really professional Dakota medicine man can grow and work.



LUNG NEOPLASMS FROM THE ENDOSCOPIST'S STANDPOINT* By John B. Gregg, M.D.

Sioux Falls, South Dakota

The paper which I propose to present to-day is based on a study which was made at the U. S. Veterans Hospital, Iowa City, Iowa, during the period from April 1, 1953 to March 30, 1954. This period was chosen arbitrarily because it was our purpose to determine as much as possible about lung cancer, especially as related to our diagnostic methods. As the endoscopist in the majority of the bronchoscopies performed during this period, I was interested in determining the accuracy of our examinations. The results insofar as diagnostic methods are concerned are encouraging, but the overall outlook for the patient with lung cancer is still not good.

By way of introduction, I would like to show you a chest X-Ray (Figure 1) taken at the V. A. Hospital not long ago. This 60-year old man complained of hoarseness for six weeks which had not responded to conservative treatment. There was a left vocal cord paralysis. Physical examination of the chest was entirely negative. The chest film which you have seen was reported as normal. Through the bronchoscope, slight bronchostenosis and slight edema of the mucosa of the left lower lobe were seen. In the cytology specimen (Figure 2) aspirated from the left main bronchus, there was definite evidence of epidermoid carcinoma. Unfortunately, because his cardiac status was poor and his gen-

* Presented at Second General Session, South Dakota Medical Association Meeting at Huron, South Dakota on May 17, 1954.



Figure 1) Postero-anterior chest film showing healthy chest. Extensive e_D idermoid carcinoma found in left lower lobe.

eral condition contraindicated, this man was considered inoperable. In years past, this case would have been considered inoperable purely because of the vocal cord paresis, indicating recurrent nerve paralysis. Yet today, some of these cases can be resected successfully, and give a chance of "a cure."



(Figure 2) Aspirated cytology specimen showing masses of anaplastic, pleomorphic cells. Diagnosis: Epidermoid carcinoma.

My primary reason for being here this morning is to discuss the diagnosis of lung neoplasms. Recently there has been much controversy in the lay and medical press^{1, 2, 3, 4} regarding lung cancer and smoking. During the course of my recent study there has been ample opportunity to form opinions regarding the importance of external agents as causative factors. However, it is not my purpose to jump on any of the various bandwagons. As you know, my primary interest in lung cancer is from the standpoint of the diagnostic bronchoscopist. Yet as a diagnostician one must be equally interested in possible modes of treatment and prognosis.

Bronchoscopy is not a young art. The use of a hollow tube to inspect the bronchial tree was described as early at 1897 by Killian.⁵ More recently, the work of Jackson^{6, 7, 8} Clerf, and others8, 9, 10, 11 have advanced the technique from that of a medical curiosity to a useful adjunct in the diagnosis and treatment of lung diseases. Formerly, bronchoscopy was limited largely to the removal of foreign bodies. In recent years, the use of this tool for diagnosis has increased. Yet, even today there is no general agreement among the investigators as to the efficacy of this method of examination of the bronchial tree. Undoubtedly, many of you heard Dr. Alton Ochsner² at Vermillion not long ago. He reported that in his clinic bronchoscopic examination showed lung neoplasms in only 36% of the cases examined. Other investigators have reported successful demonstration of lung tumors in up to 80% of the cases bronchoscoped.6, 7, 8, 12

Available evidence indicates that lung cancer, especially that arising in bronchial mucosa, is on the increase.1, 2, 13, 16 This appears be be an actual increase in the total number of such tumors, rather than merely more astute diagnoses, as has been claimed. This can be explained partially by the fact that with increased longevity, our population is gradually getting older, and age groups in which carcinomata are prevalent, are more common. However, the aging process will not account for all of the increase. Some other factor, possibly extrinsic in nature, seems to be affecting the increase in total numbers. The following helps explain my meaning: Carcinoma of the stomach, which was once the most common cancer, has not increased significantly statistically in the past ten years. Adenocarcinoma arising in the lung, usually peripherally located, has stayed about on a par with stomach cancer statistically. The bronchogenic carcinomas, primarily epidermoid and small cell carcinomas, have increased very much in the past ten years. This increase is blamed by some on smoking, industrial smoke, automobile exhaust fumes. etc. The evidence is still not conclusive, but there seems to be some correlation.

Recently, many investigations, with somewhat conflicting results, have been published regarding the use of sputum cytology examination in the diagnosis of lung cancer. 9. 14. 15. 16. 17. 18. 19. 20 It has been the purpose of many of these investigators to facilitate early diagnosis of lung lesions by almost routine sputum examination. The major drawbacks to this technique have been the cost and the variability of results. In our hands, and at the University of Iowa Hospitals, examination of the sputum and of the mucous from the bronchial tree, has produced very disappointing results.

Mass chest X-Ray surveys, as are carried out both in teaching institutions and elsewhere, have uncovered quite a few early, unrecognized and asymptomatic lung cancers. 14.21.22 However, even X-Rays often do not reveal lung neoplasms in their incipient states, and it has proved difficult to get 100% response to mass chest survey series. Yet it is with this group of bronchogenic carcinomas, especially the early, localized lesions, that the endoscopist is concerned and in which the problem of early diagnosis is so

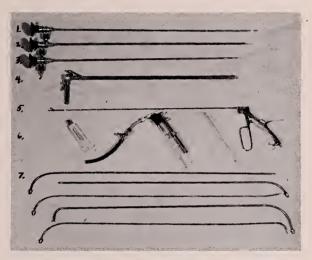
imperative. These patients may be seen because of some other respiratory complaint and a neoplasm found incidentally on bronchoscopic examination.

Examination of the bronchial tree directly and with biopsy of surface lesions, has helped diagnose lung neoplasms in many cases in the past. Yet many bronchoscopic examinations are negative, especially in the peripheral lesions. With the advent of the Papanicolaou technique.²³ pinpoint localization of the lesions by discriminative bronchiolar aspiration has made the diagnosis possible, even when the lesion is not seen. Yet even with both techniques, some early carcinomas are missed. This is unfortunate because it is only in early lesions that a "cure" can be expected. It is because of the discrepancy in ability to diagnose carcinoma endoscopically, that bronchoscopy has fallen into disrepute in many places. For this reason, many different types of bronchoscopes and aspirating apparatus have been suggested.24, 25, 26, 27, 28, 29, 30

As you are aware, any special technique, such as bronchoscopy, is only as good as the experience of the operator. However, with the combined used of bronchoscopy and cytology, utilizing the Papanicolaou, or other specialized staining techniques, the diagnosis can be made earlier and with greater accuracy in many cases. In order to obtain cytology specimens from various portions of the lung, we have seen the development of many instruments and techniques, including special bronchoscopes and aspirating tips, the use of ureteral catheters to thread into the various bronchiolar orifices, the use of gelfoam sponges for wiping, and complicated biopsy forceps. However, it should be noted that successful bronchiolar aspirating techniques and apparatus were reported by Clerf and others as much as twenty years ago. Yet even with their apparatus and newer special techniques, a significant proportion of the lesions are still missed endoscopically.

About six years ago, Dr. Bryon Merkle³¹ of Des Moines, Iowa, suggested some modifications of the usual cytological technique. He was able to deliver to the pathologist, cytology specimens of early carcinoma in cases in which this was not suspected, and to obtain specimens where biopsy was not possible. We have been using this technique, somewhat modified, with what we consider excellent re-

sults. The actual technique can be compared to the "placer mining" method of extracting gold from the stratum. Placer mining entails the use of a water stream to wash gold particles into a collecting box. We apply this principle in obtaining tumor cell studies. Figure 3 illustrates our bronchoscopy instruments.



(Figure 3) Instruments used in endobronchial diagnosis. 1, 2, 3, Telescope Bronchoscopes (right angle, retrograde and 45 degree angle), 4. Jackson bronchoscope, 5. Biopsy forceps, 6. Aspiration tube and apparatus, 7. Aspiration canulae.

Any cytology technique depends upon the fact that neoplastic cells are exfoliated or shed, due to the growth of the tumor. If only a few neoplastic cells are shed, the diagnosis by any cytological technique will be proportionately much more difficult to make. In the "placer mining" technique, we aspirate separate specimens of secretions from any suspected or suspicious portion of a lung. Then if X-Ray or direct examination shows any especially suspicious area, we carefully abrade the area with a suction tip. The area is then irrigated repeatedly with saline, the returns being saved with the specimen. By this method, we increase the amount of exfoliated epithelial material to a considerable extent. In contradistinction to the usual cytology technique, we do not consider the specimen satisfactory unless at least a small amount of hemoglobin is present. It is our purpose to excoriate the mucosa so the small flecks of it are washed into the specimen.

With the various telescope bronchoscopes and the curved aspirating tips, we are able to see into, and aspirate from, any of the bronchiolar orifices. If possible, we obtain biopsy specimens from suspicious areas, but in many cases the lesions are inaccessible to the biopsy forceps.

In handling the specimens obtained by the aspiration technique, our procedure differs from the usual cytology technique, in that we spin down the bronchial aspirations, make paraffin slides, and stain with hematoxylin and eosin stain, rather than making direct smears as is done in the Papanicolaou technique. In this way we have good, permanent slides, from which the diagnosis can easily be made.

We find this technique to be less expensive than the Papanicolaou stain technique in that fewer man-hours are required to prepare and read the slides. Our pathologists grade the slides, No. 1 to 5, according to the degree of anaplasia seen. A diagnosis of 3 or more is considered suspicious for lung neoplasm. In any case of doubt, the patient is rebronchoscoped and more specimens are obtained before definitive therapy is considered.

In the presentation of a specialized technique such as this, the disadvantages thereof should also be discussed. We have found, as others, in using biopsy and cytology techniques of this sort, that our biggest stumbling block is to differentiate inflammatory anaplasia from neoplastic anaplasia. However, we have found that the difficulty in diagnosis between inflammation and neoplasm is inversely proportional to the experience of the pathologist who is reading the cytology slides. We have been fortunate in being able to rebronchoscope twenty (20) patients upon whom the "placer mining" technique has been used. We have found that there was no residual injury to the bronchial mucosa from the trauma of aspiration. In cases in which the endobronchial changes were due to inflammation, the mucosa reverted to its former state, or to healthy endobronchial epithelium. We have found no evidence of endobronchial seeding of neoplasm with this technique. There was no residual ulceration or scarring.

The only complication which we have seen with this technique was in one patient who developed a pneumothorax within the first 24 hours post-bronchoscopy. This subsided rapidly on conservative treatment. In the group of patients upon whom this study is based, we obtained eight (8) false-positive

specimens, (four of these being upon two patients) out of 128 specimens submitted. These two patients are still being observed because of the possibility of lung neoplasm. The remainder of the chest lesions were proved to be inflammatory in origin.

At the V. A. Hospital, both because many of the patients now fall into the cancer age group, but also because many patients with respiratory symptoms are admitted, we do many bronchoscopic examinations and have seen an unusual amount of lung cancer in the past year. I would like to discuss some of our findings briefly.

Our Pathology Department reports the following facts: "50% of the deaths in this hospital in the past year were due to cancer. One-third of these, that is, one-sixth of the total deaths, were due to lung cancer. In the past six months, 62% of the deaths have been due to cancer, and again one-third of these have been lung neoplasms."

During the past year we have performed 190 bronchoscopic examinations on 168 patients. Forty-two of these bronchoscopies were done on patients who were proved to have lung neoplasms. Nine of these were repeat bronchoscopies. In the past year there have been 38 proved new lung neoplasms diagnosed in our hospital. Of these, one was diagnosed primarily at autopsy; in one the diagnosis was made at thoracotomy, with X-Ray evidence of a peripheral lung tumor; in four the diagnosis was not suspected or the patient was moribund and diagnostic procedures were not done; and in 32 patients, bronchoscopic examination was performed. We were able to describe evidence of carcinoma, that is, stricture, localized edema, gross neoplasm, carinal involvement or other evidence of carcinoma in 70% of the cases examined. Cytology specimens were obtained and were positive in 5 cases in which no lesion could be seen. In all, only 5 cases were referred to the bronchoscopy clinic, in which evidence of the lesion could not be seen or in which the cytology specimen was negative (of these, one was a mediastinal tumor and one was a chondroma of the lung). Therefore, we were able to suggest the presence of lung cancer by bronchoscopic examination in 80% of the cases examined.

In this group of lung cancer patients, the average age was about 57 years in the epider-

moid and round cell carcinoma group, and 60 years in the adenocarcinoma group. The range in the epidermoid carcinomas was from 36 to 66 years, and the range in the adenocarcinoma group was from 53 to 66 years. The most common symptoms were, in order of frequency, cough, 53%, chest and shoulder pain, 32%, dyspnea 26%, weakness and fatigue, 26%, weight loss 26%, hemoptysis 21%, dysphasia 16%, epigastric pain 16%, hoarseness 13%, no symptoms 13%, anorexia 8%, neck mass 8%. There were no females in this series. The incidence of smoking in this group of tumor patients is noted in Table 1.

Table No. 1 Incidence of Smoking (38 cases)

Epidermoid and round cell	24 cases	100%		
Adenocarcinoma	11 cases	73%		
Chondroma	1 case	100%		
Smoking habits unknown	1 case			
Non-smokers (3) include	two with a	denocar-		
cinoma and one mediastinal tumor.				

Of these patients 34 were "heavy smokers." By this we mean one pack or more per day. One smoked "10 to 12" cigarettes per day.

In our patients the findings in regard to location and position of the lesions compared quite favorably to results reported in other series. See Table No. 2.

Table No. 2

Location of Lung Neoplasms	Epider- moid	Adenocar- cinoma
Right upper lobe	7	3
Right middle lobe	1	Õ
Right lower lobe	5	3
Left upper lobe	6	2
Left lower lobe	7	2
Primary unknown		1
Mediastinal tumor	1	

In a majority of the cases, we were able to find some radiologic evidence of lung abnormality before bronchoscopic examination was performed. The most common X-Ray findings in order of importance were: 1. Atelectasis; 2. "pneumonitis"; 3. Mediastinal enlargement; 4. Isolated peripheral lung parenchymal lesion; 5. Tracheal shift; 6. Pleural effusion. In the determination of location, type and extent of chest lesions, we rely on several radiological techniques for the preliminary examination. These include the routine chest film, and bronchograms or laminograms where indicated. We feel that both the postero-anterior and lateral chest X-Ray should be taken. In cases of doubt, we use the oblique and lordotic views. Bronchograms are of greatest value in determining whether there is bronchial obstruction by neoplasm. With laminograms, we are able to "slice" the patient in 1 cm. layers. By this latter means, the outline, distribution, density and the presence of calcification of a lung mass may be visualized. We feel, however, that the most important X-Ray studies are the PA and lateral chest films. These indicate quite accurately the approximate location and segment of the lung which is involved. Then, pinpoint bronchoscopic examination and cytology studies can be obtained.

The successful diagnosis and treatment of lung lesions demands a teamwork approach. These cases usually are seen first by the Internists for diagnostic workup. After X-Ray studies are completed, bronchoscopy is almost universally employed. By bronchoscoping the patient, we are usually able to tell where the lesion is, what type, the extent, and to obtain biopsy and cytology specimens to establish the diagnosis. We can also inform the chest surgeon regarding the chance for resection of the lesion. In this way we are able to give, in some measure, the prognosis.

When the endoscopist reports a lesion within 1 cm. of the carina, carinal fixation or far advanced lesions, it is usually considered inoperable. In some cases no endobronchial lesion can be seen. Often, in these cases, careful aspiration of the suspected area, as seen in the X-Ray, and by using "placer mining," cell studies can be obtained which disclose an early lesion. Occasionally during a routine bronchoscopy, suspicious lesions are observed in the smaller bronchioles. Cytology specimens in these cases are of great value in ruling out neoplasm, because often a biopsy specimen can not be obtained.

The one group of neoplasms in which the bronchoscopic examination and cytology studies produce the poorest results, are the lesions located in the parenchyma of the lung. However, these lesions are often picked up early on chest films. It is the opinion of the chest surgeons in our hospital, that in any parenchymal lung lesion, especially if no evidence of calcification can be demonstrated, the lesion should be excised.

The results of treatment given to the patients seen in the last year are summarized in table No. 3.

Table No. 3

Operations

Dead

Pneumonectomy

Lobectomy

Lobectomy

No operation

Exploration and biopsy

Of the pneumonectomies, six were considered palliative. Therefore the likelihood of survival of more than four patients out of thirty-eight for 5 years is remote.

In our experience, bronchoscopy combined with pinpoint endobronchial cytological aspiration biopsy has proved an accurate, easy method for early diagnosis of lung cancer. It can be accomplished with little physical and psychic trauma to the patient. The results insofar as localization, description and evaluation of the extent of the pathology justify bronchoscopy in every case suspected of lung neoplasm.

CASE PRESENTATIONS

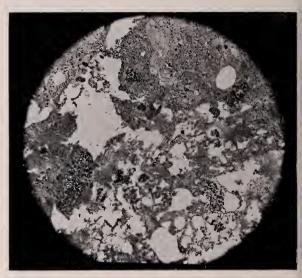
In order to demonstrate to you some of the cases we have seen, I will present briefly four representative cases.

- (1) J. P. H., 66 years. No chest symptoms. There was a coin lesion in the right upper lobe peripherally found on routine chest X-Ray. Bronchoscopy was not done. The right upper and middle lobes were resected, the pathological diagnosis being adenocarcinoma. The patient died of an embolus on the sixth post operative day.
- (2) C. F., 58 years. Complaint: Left chest pain; episodes of hemoptysis for 8 weeks; atelectasis, left upper lobe. Bronchoscope examination was essentially negative. Cytology specimen was 5 plus positive; diagnosis epidermoid carcinoma. Left pneumonectomy March, 1954. Patient still living.
- (3) C. R., 53 years. Complaint: Chest pain for one month, fatigability and nervousness for several months. Chest X-Ray-pneumonitis, left lower lobe (Figure 4). Bronchoscopy revealed mucosal edema in the left lower lobe. The cytology specimen was 5 plus positive; (Figure 5). Pathological diagnosis, poorly differentiated epidermoid carcinoma. Left pneumonectomy January, 1954 (Figure 6). Patient still living.
- (4) J. A. M., 62 years. Complaint: Weakness, weight loss, cough, right chest pain for 2 months. Chest X-Ray pneumonia, right lower lobe. Bronchoscopy showed stricture in the right lower lobe. The cytology speci-

men was five plus positive. Biopsy reported "poorly differentiated epidermoid car-



(Figure 4) P-A and lateral chest X-Rays showing pneumonitis located in medial portion, left lower lobe.



(Figure 5) Aspirated cytology specimen showing clumps of neoplastic cells. Diagnosis: Poorly differentiated epidermoid carcinoma.



(Figure 6) Resected lung specimen showing location and size of lesion in left lower lobe bronchus.

cinoma." Exploratory thoracotomy December. 1953, but the lesion was inoperable. The patient died post operatively.

In conclusion I would like to emphasize several observations we have made in conducting this study of lung tumors:

- 1. With the advent of each new antibiotic, we see at least one patient in whom the diagnosis of a lung cancer has been delayed from two to six months, while he has been treated for "pneumonitis, atypical pneumonia, virus pneumonia," and the like.
- 2. It is our feeling that any chest lesion not resolving in about three weeks in a person over 35 years of age, especially a male, should be investigated thoroughly. Unfortunately, too many chest lesions are "watched" or "observed" for from two to six months, often with fatal results. Early investigation of any nonresiding chest lesion is imperative.
- 3. Symptoms, physical findings and X-Rays are often minimal in early lung neoplasms. In a good percentage of bronchogenic carcinoma there may be wide-spread metastasis before clinical signs appear. However, it is the early cases in which the diagnosis must be made in order that there be a chance for "cure."
- 4. Bronchogenic carcinoma is apparently increasing. This appears to be a statistically important increase, primarily in the epidermoid and in the small round cell type. Cigarettes, and other irritants, have been blamed as a cause of lung cancer.
- 5. The diagnosis of lung cancer early is being improved by refinements in X-Ray, bronchoscopy and cytology techniques. However, in too many cases these procedures are not carried out until the patient is beyond the chance of cure.
- 6. By using "placer mining" bronchial aspiration, we are able to increase the number of exfoliated cells aspirated from a suspicious lung segment, with greater chance for positive results. We are able to go around corners visually and with suction, into smaller radicles of the bronchial tree.
- 7. By making spun-down specimens and regular paraffin blocks for pathological sections, we are able to obtain better specimens and also decrease the number of man-hours in making cytology specimens. In our hands, the results from sputum and bronchial mucous smears have not been reliable.
- 8. In using the "placer mining" aspiration,

false-positives occur, but not too often. The biggest difficulty is encountered in distinguishing between inflammatory anaplasia and carcinoma.

- 9. In our experience persons in mental hospitals in the Iowa City area, have a greater chance of cure of lung cancer than the average man on the street. We attribute this to early case finding through periodic chest X-Rays.
- 10. The only way that lung neoplasms will be cured is by prompt, early diagnosis and adequate surgical excision of the tumor along with the neighboring lymphatic system.
- Ochsner, A., DeCamp, P. T., and Ray, C. J., Bronchogenic Carcinoma, Geriatrics, January 1954.
- 2) Ochsner, A., Cancer of the Lung: A Challenge to the Public and Profession, Paper presented at The Dedication of Andrew E. Lee Memorial Building, University of South Dakota, March 27, 1954.
- Wynder, E. L., Graham, E. A., and Croninger, A. B., Experimental Production of Carcinoma with Cigarette Tar, Cancer Research, 138:855, Dec. 1953.
- 4) A Scientific Perspective on the Cigarette Controversy, Monograph published by the Tobacco Industry Research Committee, 5400 Empire State Building, New York, N. Y., 1954.
- 5) Jackson, C. L., Tracheo-Bronchoscopy, Esophagoscopy and Gastroscopy, The Laryngoscope Co., 1907, p. 13.
- Jackson, C. L., and Jackson, C. L., Jr., Bron-choesophagology, W. B. Saunders Co., Phila-delphia, 1951, p. 214.
- Jackson, C. L., and Jackson, C. L., Jr., Diseases of the Nose, Throat and Ears, W. B. Saunders Co., Philadelphia, 1947, pp. 657-669.
- 8) Herbut, P. A., and Clerf, L. H., Cytology of Bronchial Secretions, Am. Rev. Tuberculosis, 54:488-494, Dec. 1946.
- Clerf, L. H., Herbut, P. A., and Nealon, Jr., T. F., Cytologic Studies and Prognostic Results in Bronchogenic Carcinoma, Ann. Otol. Rhinol.
- and Laryng., 60:840-46, Sept. 1951.

 10) Boyce, F. F., The Rational Use of Endoscopy in Surgery, Ann. Otol. Rhinol. and Laryng., 62:-838-47, Sept. 1952.
- 11) Benedict, E. B., Endoscopy, N. England J. Med., 248:500-10, Mar. 19, 1953.
- McBurney, R. P., McDonald, J. R., and Clagett, O. T., Bronchogenic Small-Cell Carcinoma, J. Thoracic Surg., 22:63-73, July, 1951.
- 13) Steele, C. H., Bronchogenic Carcinoma, Ann. Otol. Rhin. and Laryng., 63:5-21, March, 1954.
 14) Adams, W. E., Indeterminate Pulmonary Lesions, Postgraduate Med., 15:222-29, Mar. 1954.
- 15) Wihman, G., and Bergstrom, I., Histologic Technique for Examination of Cell Content of Sputum, Acta Med. Scandinav., 142:433-40,
- 16) Buffmire, D. K., and McDonald, J. R., Factors Responsible for Failure of Cytologic Examination in Cases of Bronchogenic Carcinoma, S. Clin. N. A., 31: 1191-97, Aug. 1951.
 17) Gowar, F. J. S., Carcinoma of the Lung; the Value of Sputum Examination in Diagnosis, Brit. J. Surg., 30:193, 1943.

(Continued on Page 238)



EARLY CHOLECYSTECTOMY IN THE TREATMENT OF ACUTE CHOLECYSTITIS By F. R. Williams, M.D., F.A.C.S. and J. A. Cline, M.D. Rapid City, South Dakota

INTRODUCTION:

Management of acute cholecystitis has been a controversial subject among surgeons for many years. The exacerbating nature of the disease and its chronic aftermath has left but very little dissention in regard to the role of cholecystectomy in the eventual management of these patients; however, considerable difference of opinion is held regarding the stage of the disease in which cholecystectomy is best utilized. There are those who advocate conservative medical management of the acute phase of the disease and advise cholecystectomy following remission of its acute manifestations. On the other hand, there is a growing opinion that early cholecystectomy is indicated in many cases. The more conservative advise drainage of the gallbladder. In an effort to evaluate the role of early cholecystectomy in the management of acute cholecystitis a series of 29 cases of acute cholecystitis are presented, all of whom underwent cholecystectomy during the acute stage of their disease during the period of January 1, 1948 to June 31, 1953.

SELECTION OF CASES:

The variation of clinical signs, symptoms and pathological findings in cases that are termed acute cholecystitis are well known and it is not the scope of this paper to discuss it. In order to arrive at a constant factor in the evaluation of this problem it was necessary to select only those cases who exhibited

Presented to the South Dakota Chapter, American College of Surgeons, January 30, 1954, Huron, South Dakota.

the following minimum phenomena in the pathological examination of the gallbladder: 1. edema of the walls. 2. destruction of the mucous membrane. 3. infiltration with polymorphonuclear neutrophils. 4. fibrin formation and 5, focal areas of necrosis in the wall of gallbladder. So as to obtain a true picture of the results, those patients whose picture was complicated by obstruction of the common duct, hepatitis, pancreatitis and disabling diseases of cardiovascular, renal and pulmonary systems were not included in this study.

STATISTICAL EVALUATION:

Age: The average age was found to be 47.9 years. The youngest patient in this series was 19 years of age and the oldest 71 years. 55% of these patients were between the ages of 31 and 60 years.

Sex: The common opinion that cholecystitis is primarily a disease of the female was born out in this study which indicated that 82.7%

of these patients were females.

Physical Findings: The only constant physical finding in this series was the presence of tenderness in the right upper quadrant. Nausea, vomiting, infrascapular radiation of pain, spasm and rebound tenderness in the right upper quadrant appeared in great variation. Palpable gallbladders were present in 37.8% of these cases. The temperature on admission to the hospital was also subject to great variation. The lowest temperature was 98°F, the highest was 102°F. It is interesting to note that 44.8% of the patients had a normal temperature 31% had 1 degree or less of fever, and 20.7% had more than 1 degree but less than 2 degrees of fever.

Laboratory Findings: The average white blood count on admission to the hospital was 12,979. The lowest count was 5,100 and the highest 29,700. 75.5% of these cases averaged 11,545 and 20.7% averaged 6,900.

X-ray Examination: Six patients in this series were not submitted to X-ray examination. A plain film of the gallbladder area was negative for radiopaque stones in ten patients. Stones were identified in six and a non-functioning gallbladder demonstrated in eight.

Pathological Examination: As stated previously, all patients in this group had gallbladders which, on pathological examination revealed edema of the wall, ulceration of the mucous membrane, infiltration of the wall with polymorphonuclear neutrophils, fibrin formation, and focal necrosis of the wall, as minimum pathological findings. Stones were found in 100% of the cases.

Duration of Acute Symptoms: Average duration of acute symptoms prior to surgical intervention was 5.3 days. The shortest was less than twelve hours and the longest was 18 days. 55% averaged 2.5 days and 86.2% averaged 4.2 days duration of acute symptoms prior to surgery.

Morbidity: The febrile course of these patients averaged 2.9 days following surgery. The shortest was 1 day and the longest was 6 days. 51.7% averaged 1.9 days and 86.2% averaged 2.6 days of fever. There was one postoperative complication; a bronchopneumonia following surgery. The patient ran a moderate febrile course for 3 days following surgery and her convalescence was uneventful.

Duration of Hospitalization Following Surgery: The duration of hospitalization in this group averaged 10.3 days following surgery. The lowest was 5 days and the longest 19 days. 68% of these patients averaged 7.9 days. 86.2% averaged 9.1 days. It is common practice to discharge patients from 5-6 days post-operatively provided they reside in the local community. Many patients, however, are retained in the hospital for longer periods because of the distance that they live from the community.

Mortality: There were no deaths recorded in this group.

TYPICAL CASES:

Case No. I: A 67-year-old white male was admitted to the hospital in June, 1952, with the history of sudden onset of right upper quadrant pain radiating to the right infrascapular area associated with nausea, vomiting and chills of a progressively increasing severity of 3 days duration. There had been no history of previous such episodes, intolerance to any particular foods, flatulence, or other symptoms referable to chronic gallbladder disease.

Physical examination was not remarkable except for a temperature of 102°F. by rectum and the presence of exquisite tenderness, spasm and rebound tenderness in the right upper quadrant. The gallbladder was not palpable.

Laboratory studies revealed a white blood count of 17,790 with 87% polys. A plain film of the abdomen failed to reveal any radiopaque stones in the gallbladder area.

This patient underwent emergency chole-cystectomy on the day of his admission. Pathological examination of the gallbladder revealed the presence of a number of large faceted stones with one impacted in the ampulla; edema of the wall, ulceration of the mucous membrane, infiltration with polymorphonuclear neutrophils and focal areas of necrosis and hemorrhage throughout the wall of the gallbladder.

Following surgery the patient's temperature did not exceed 101°F. by rectum. On the second day the patient was afebrile, taking his food and fluids well, and up and about with essentially no complaint. The drain was removed from the wound 48 hours postoperatively and sutures were removed the fifth postoperative day. The patient was discharged home ambulatory and asymptomatic on the seventh postoperative day.

Case No. II: A 21-year-old white female was admitted to the hospital in August, 1948, complaining of sudden onset of right upper quadrant pain 3 days prior to admission. Pain was rather sharp, stab like in character and recurred at intervals, only to subside. However, the following day, the patient developed an aching, deep, and boring type of pain in the right upper quadrant which was associated with nausea and vomiting. Symptoms continued of a progressively severe

nature. There was no history of chronic gallbladder disease.

Physical examination revealed exquisite tenderness in the right upper quadrant, associated with spasm and rebound tenderness, and a palpable mass in the right subcostal area, which was exquisitely tender. Temperature on admission was 100.8°F. by rectum, white blood count was 15,500.

Patient was submitted to emergency cholecystectomy on the day of admission.

Pathological examination of the gallbladder revealed a large number of various sized stones with one impacted in the ampulla. The mucous membrane was denuded from the gallbladder. There was infiltration of polymorphonuclear neutrophils, fibrin formation, and focal areas of necrosis in the wall of the gallbladder.

This patient had a febrile course of 3 days postoperatively, temperature not exceeding 100.6°F. The second postoperative day the drains were removed, the patient was up and about, taking her food and fluids well with essentially no complaints.

The sutures were removed the fifth postoperative day. The patient was discharged home on the seventh postoperative day ambulatory and asymptomatic.

Case No. III: A 59-year-old white female was admitted to the hospital in February, 1951, with complaints of an aching pain in the right upper quadrant of 7 days duration. There was no history of chills or fever, nausea or vomiting or radiation of this pain to the right infrascapular area. The patient stated that she had had a cholecystostomy performed 3 years previously for acute cholecystitis and had had intolerance to fried and fatty foods, considerable flatulence and intermittent episodes of aching pain in the right upper quadrant of 25 years duration and since her previous surgery.

Physical examination revealed spasm in the right upper quadrant. There was no rebound tenderness. An exquisitely tender palpable mass in the right upper quadrant was identified. Admission white count was 14,000 with 86% polys. X-ray examination was not done. Patient underwent cholecystectomy 24 hours after admission to the hospital. Pathological examination revealed a gangrenous gallbladder containing a number of varied size faceted calculi, one of which was impacted in the ampulla.

Patient's postoperative course was essentially uneventful. She ran a moderate febrile course for 2 days postoperatively. The temperature did not exceed 100°F. by rectum. Drains were removed in 48 hours. Sutures were removed in 5 days. The patient was discharged home on the 6th postoperative day ambulatory and asymptomatic.

SUMMARY

1. 29 cases of uncomplicated acute cholecystitis which were treated by early cholecystectomy are

2. 86.2% of these patients averaged 4.2 days of acute symptoms prior to surgical intervention.

3. 86.2% of these patients averaged 2.6 days of

fever following surgery.
4. 86.2% of these patients averaged 9.1 days of hospitalization following cholecystectomy.

5. There were no deaths reported.
6. One case of bronchopneumonia was the only postoperative complication in this group.

CONCLUSIONS

1. Cholecystectomy in acute cholecystitis appears to be the treatment of choice in the patients who is an average surgical risk. The morbidity to be anticipated is essentially no more than can be expected from cholecystectomy in the chronic stage of the disease

2. Gallbladder studies, electrocardiograms, liver function tests, blood volume determinations and the investigation of the cardio-respiratory and renal systems are not only an aid in establishing the diagnosis in obscure cases but also in the evaluation of the surgical risk in complicated and debilitated praticals.

bilitated patients.
3. The use of broad spectrum antibiotics and blood transfusions can frequently convert a poor surgical risk patient to an average risk patient in a matter of a few days and thus make the patient available for early definitive surgical intervention.

4. It is our opinion that the right subcostal incision extending from the right anterior axillary line to the left costal margin provides the most ideal exposure for cholecystectomy and is at-

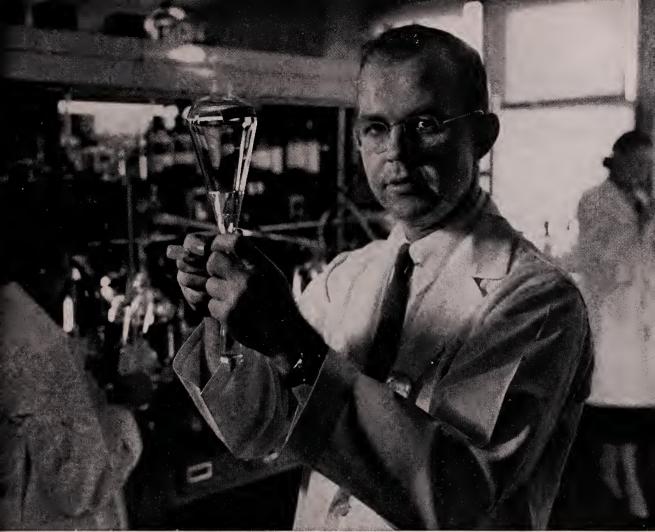
ideal exposure for cholecystectomy and is attendant with less postoperative complications than other incisions for exposure of this area.

5. The dissection of the adherent inflammatory mass so frequently found in the right upper quadrant should be done meticulously and the common duct identified, without question, before any irrevocable dissection is performed. Frequently, what appears to be a formidable problem of dissection, with dense inflammatory adhesions and section, with dense inflammatory adhesions and edema obscuring the anatomy about the pedicle and common duct, can be resolved by locating a plane of cleavage, along the fundus of the gallbladder at its medial reflexion on the liver, and using the first these adaptates.

the finger to reflect these edematous tissues medially and inferiorly to expose the pedicle.

6. It is recommended that both the cystic artery and cystic duct be ligated prior to their division. This is an effective technique to prevent accidental hemorrahge from the cystic artery and leakage of bile from the cystic duct attendant with attempts to pass a ligature about a clamp deep in a gall-bladder wound. Drainage of the foramen of Win-slow is thought to be a procedure of value because of the intense secondary bacterial invasion which is so often present in acute cholecystitis and the frequency of bloody ooze from extensive raw surfaces.

(Continued on Page 238)



PHOTOGRAPH BY RICHARD BEATT

What we still don't know about cancer

—and one of the reasons why

IN THE PAST FEW YEARS, our knowledge of the nature of cancer, and how to treat it, has grown encouragingly. Patients, who would have been considered hopeless cases even five years ago, today are being completely cured. And even those who apply for treatment too late can usually live longer—and less painfully—because of modern palliative treatment.

All the same, there have been defeats as well as victories. We do not know—to take a single example—why so many more men are now dying from eancer of the lung. In 1933—just twenty years ago—lung cancer killed 2,252 men; in 1953, some 18,500. That's a great increase—which even our expanded population, and other known factors, can't possibly account for in full.

Well, why haven't we found more of the answers to cancer?

Not only because cancer is an im-

mensely complex problem: difficult to diagnose, and difficult to treat; challenging to the best research minds.

All that is true enough. But there is another reason: we do not have enough money.

Last year your gifts to the American Cancer Society were more generous than ever before. But they were not enough. You gave the Society almost twenty millions to fight a disease that—at present death rates—will kill twenty-three million living Americans.

Less than one dollar for each American destined to die from cancer. Much more is needed for research, for education, for clinics. Won't you please do your part . . . now?

CANCER c/o Postmaster, Name of Your Town

American Cancer Society

Cancer

Man's cruelest
enemy

Strike back

Give

GENTLEMEN:
Please send me free information on cancer.
Enclosed is my contribution of \$...
to the cancer crusade.

Name

Address

City

State

Simply address the envelope:



SOME BASIC FACTORS IN THE PRODUCTION OF NERVOUSNESS*

Вy

Hewitt B. Hannah, M.D., Minneapolis, Minn.

I consider it an honor and a pleasure to have the opportunity to come before you as I have had so many close friends in the Medical Association of this state for over 30 years.

The subject which I am about to discuss has been a very controversial one and almost every lay person thinks or feels that he knows the cause of nervousness and how to cure it. It would only be necessary for you to go about with me during one day of my practice and I am certain that you would then know all the answers to this problem, as you would have an opportunity to meet a relative and friends of the patient as well as the patients themselves.

In a discussion of these factors, we are as a rule not dealing with major mental disturbances, but they do involve the interplay or inter-relationship of many peculiar attitudes on the part of the patient. In order to understand these factors, we must necessarily study the total personality of the individual and the various parts that go to make up his total personality. It is obvious to anyone that there would be no personality if there were no physical and biochemical structures at the basis of life. Too often neuropsychiatrists fail to appreciate the physical structures and the biochemical makeup of the individual and pass by some organic disease. On the other hand, the internist, in his diligent search for some structural disease, will fail to under-

* Presented to the Sioux Falls District No. 7. February 2, 1954.

stand some simple problem in personality not based on structural or biochemical disorder. He may concentrate his attention on disease and pay little attention to the patient as a person. He may have little regard for the factors which make the patient an individual as distinguished from his fellows. Often he sees nothing more in the patient than the sum total of the disease which has a certain detailed symptomatology, etiolgy, nosis, pathological anatomy and medical or surgical treatment. More often the disease has been over-emphasized and the patient has been overlooked. It is true that tremendous strides have been made in diagnostic methods and in laboratory medicine, but these advances seem to accentuate this tendency to forget the individual. The emotional life of the patient, his family pattern, his economic and social situations, may be very essential in understanding and treating the symptoms which he presents.

Today we hear the term "psychosomatic medicine" used very freely by doctors and lay people. What do we mean by psychosomatic disorders and how are we going to go about to understand these disorders? In the first place, a psychosomatic disorder is one in which the individual apparently has no structural disease or biochemical disorders of a prolonged nature, but where he has various subjective complaints that have been projected into various parts of his body by a disturbance in his emotions either on a conscious or a subconscious level.

Animal Experiments

At this time it might be well to look back and see some of the animal experiments that have been carried out. It is the conditioned reflexes that ties up your behavior or the behavior of your body with situations that are found in civilization.

Pavlov carried out a series of experiments on the salivary glands and the gastric glands of dogs. It is natural for all the functions of the body to adjust to critical situations. If you watch a dog under x-ray, you can see him swallow a bismuth meal and see his stomach and his intestines fill up. You can see the normal slow movements of the intestines as he digests the food. If you bring a cat upon the scene, the dog will become tense, the hair of his neck bristles, and all the movements of his stomach and intestines come to a stop. In anger or in any other emotions, such as fear or jealousy, the dog reacts with his entire body.

A dog was conditioned to react to a bell, a bell with a low musical note, just as he would react to food. Every time he heard this low musical note, food was brought and his tail would wag. He would jump about in pleasant anticipation and his mouth would water. Soon he was conditioned to act this way whenever he heard the bell with the low musical note. Next Paylov conditioned him to respond to a bell with a high musical note. An electric wire was attached to a battery and every time the high note would sound the dog received a slight shock. Of course, this frightened the dog. In a short time he showed the same fear whenever the high notes were sounded, even when no shock occurred. His muscles would undergo contraction, he would go over into a corner with his tail between his legs. The fear would cause the cramping of his intestines and the dryness of his mouth. The dog's whole body was conditioned to react to the high-pitched bell.

Then the bells were changed gradually. Every day for the high-pitched bell one a little lower in tone was substituted. Still the dog's behavior remained the same. He was no longer receiving the electric shock of course, but he was hearing the bell with the high-pitched tone.

While the tone of high pitch that set off the fear reaction was being changed daily for a tone of slightly lower pitch, the low-pitched bell that set off the salivation reaction was also being changed. Daily for the low bell that promised good things to eat, were substituted other bells of slightly higher pitch. Still for a long time the dog did not notice the difference. When the lower tone was sounded, the dog's automatic bodily functions, such as salivation, relaxation of the intestines, release of gastric juices, etc., reacted exactly as to the food itself.

The bell of lower pitch said — "Come and get it," and the dog would wag his tail and act happy. The bell with the higher pitch said — "Somebody will get you if you don't watch out," and the dog would cower in a corner with his mouth dry, and his tail between his legs.

The day finally came when the sounds of the low- and high-pitched bells were so much alike that the dog could not distinguish between them. Two antagonistic reflexes were set off by this intermediate bell.

Under these circumstances, what happened to the dog? The same thing happens to a dog as would happen to a human being under like circumstances. He developed a so-called neurosis. He went into his corner and trembled all over. He refused all food. He could not sleep. He was very irritable and snapped at every one. At times his heart would beat wildly. At other times there was increased salivation. Sometimes his mouth would be dry but he refused all water. The conflicting conditioned reflexes had made the poor dog a victim of increased nervous tension.

It took many months of re-education to cure this type of dog of his neurosis.

The next time you are told that mental disorders or nervous disorders are imaginary, you can describe the experimental neurosis in dogs.

Experimental neuroses have been produced in dogs, sheep and in pigs. The symptoms of these animals have taught us much about the unhappy behavior of human beings. It has been said that Pavlov's bell should be heard in the practice of medicine and surgery in every country in the world.

Accidental Neuroses

The experimental neuroses produced in dogs by conditioning and conflicting responses is just what happens by accident to us humans.

A father will slap his child for no good

reason, and the next day he will give him candy for the same reason. The child never knows where he stands. One day the father stands for a piece of candy and the next day for a sock on the jaw.

When we cannot distinguish between stimuli we become confused. The conflict occurs within ourselves. We feel that we must do two contradictory things at the same time. This conflict may not occur at the level of brain activity that is under our conscious control. The conflict involves our glands, our stomach, intestines, blood vessels, heart, etc. All we know is that we feel nervous, that we have abdominal cramps, or that our feet are cold and clammy. If our digestion is affected, we take soda and find fault with the cook.

In order to get down to the root of the problem, and in order to understand it more fully, I would like to divide our personality up into four major parts.

- 1) The first part has to do with the physical structure of the individual. We have the skeleton, the muscles, the gastrointestinal system, the circulatory system, the central and peripheral nervous systems, and the excretory system.
- 2) The second great system is the biochemical system. We take in chemicals in the form of foods and oxygen, and we either store this food for future use or we burn it to create energy which operates our machine.

We have an excretory system in the nature of respiration, perspiration, the large bowel, and the genito-urinary system.

- 3) The third great part of our personality deals with the field of our emotions, which I have just briefly called your attention to in the dog experiment.
- 4) The fourth part has to do with what lay people term our minds which is based upon that part of our mind known as our intelligence. Our behavior, or how we act, or what we do, comes about through the relationships between the emotions and our intellect.

Emotions

There are three great groups of our emotions. The first emotional group is called the fear group and is made up of anxiety and fear

The second group consists of hate, anger, jealousy, envy, greed, hostility and resentment.

The third group of emotions is the so-called love group and this is made up of love, faith, hope, courage, kindness, charity, and sex.

From very early life there is a conflict going on between the fear and the love group. There is also a conflict existing at all times between the rage group and the third group or the love group. In other words, here is a constant battle between these various groupings throughout almost our entire life.

On the other side of the fence, our intelligence is attempting to act as a governor to help control the fight between our emotions. Because we have intelligence, we also have attention, perception, comprehension, memory, judgment, insight, stream of thought, etc.

Our minds and our bodies are taught many behavior patterns, many of which are in complete conflict with each other. In almost every family, situations arise to produce friction, jealousy, and strain. Situations also arise which produce loyalty, security, affection and love. The result is that children love, fear and hate their parents at one and the same time and they are only vaguely aware of their conflicting emotions.

Many examples have been given of automatic condition reflexes in one's life. The story is told about an architect who could not enter a church without excessive salivation. Sometimes when he went into a church he felt nauseated and had to vomit. As a boy in France, where religious hatred was in good taste, he was taught to spit every time he passed a certain kind of church.

Another example is a beautiful rose which would become the trigger which released the mechanism of the conditioned reflex. Take, for instance, the story of the asthmatic patient.

When he was in college he fell in love with a girl, to whom on certain mornings he used to send a bouquet of lovely roses.

He was poor, ambitious, and thought he could never marry. She thought he was trying to let her down slowly. The clandestine nature of their love made them both feel guilty. Each projected his guilty feeling of distrust to the other, and this distrust led to jealousy, quarrels, and fights. He left the college and enrolled in another university. She became engaged to another man. He had a nervous breakdown.

Finally he decided to forget her entirely; in fact, he had forgotten her completely when he first consulted his doctor. But his bronchial tubes had not forgotten; for, at first after the two had separated, he would gasp and become rigid whenever he saw a rose. Later, this habit became an unconscious reflex, something that he did without being aware of the cause. When it became very severe he had asthma. Difficulty in breathing meant many things to him. It was his way of chastising himself. It meant penance for the mistake he had made in yielding to his cowardice. He did not like to admit these things. He liked to explain his troubles by saying allergy it sounded better than systerical difficulty in breathing.

One morning this fellow called his doctor because of an attack of asthma. The doctor told him to take some adrenalin. The fellow said there were some roses in the house and that his wife had bought them the day before. The doctor asked him to come to his office in the afternoon. When he came in to see the doctor he found there a bunch of roses on the doctor's table. In a very few moments he began to have another attack of asthma. He was angry with the doctor because he had roses in his office. The doctor asked him to come over and examine the roses. He found that the roses were not real ones but were made out of paper. The story then concludes that his asthma disappeared at that time. It was on the basis of this experiment that the doctor was able to find out the hidden subconscious conflicts in this man's past life.

Security

On all hands and on all sides of us, we hear the term "security" being used. There are certainly many phases of security, but in a psychiatric sense I like to think of the following units.

The first great security is economic. We must all have shelter, food, light, heat, etc. We want this security now and we look forward to accumulating enough so that we will have such economic security when we are unable to work and produce.

In the last 20 years increasing taxation and inflation has conditioned us to make us more anxious and more fearful as to this economic security both in the present and in the future.

In the second place, we want physical security from disease and we want to be secure in

our health.

In the next place, we want to remain well mentally and not become psychotic and not have to be treated in an institution. In other words, we want security both economically, physically and mentally.

In the next place, we want security so far as our relations with our mate and our family. We want an absence of domestic difficulties within our family and we want real love and devotion within our home.

Probably the last and greatest security that most people are looking forward to is that of spiritual security. They want to be safe in that great world beyond the grave. In general, it is the emotional disturbances over the five great securities that increase people's nervous tension and produce many of the projected nervous symptoms.

The anxiety syndrome was first described by Hecker in 1893, but did not receive general recognition in this country until after the first World War. It has been known by many misleading terms, such as neurocirculatory asthenia, spastic colon, nervous exhaustion, nervous breakdown, shattered nerves, etc. The picture varies in the number, character and severity of the symptoms. We must understand that every person is basically anxious and that the anxiety syndrome may be symptomatic of other mental disorders, such as pathological depression, phrenia, and even organic disturbances associated with paresis, trauma, and postencephalitis. The patient may complain of difficulty in sleeping, of being fatigued, of headaches, of pressure on the top of his head or a band around his head, or of attacks when his heart beats fast, or itching over various parts of his body, or undue perspiration, or almost any symptoms that you may think of. Examination will usually reveal a tense, restless, uneasy individual with cold, clammy hands and feet. The pulse rate may be increased, the abdomen may be tender to palpation, and the deep reflexes are usually over-active.

The differential diagnosis begins with the taking of a very careful history. In getting this history, one should delve into all the emotional conflicts and emotional traumas of early life as far as one can on the conscious level. The patient should be permitted to give all of his symptoms and the doctor

should be most attentive. A careful physical, neurological, and serological examination should follow, and one should be sure that the individual does not have some structural disease of his body or some organic disease of his central nervous system. It is very embarrassing to the physician who has treated a patient for nervousness or has treated him for an increase in his nervous tension state, to find out subsequently that the patient was a case of early paresis or has some trouble such as brain tumor or some disease of his body. We often hear that the diagnosis should be made entirely by exclusion, but, on the other hand, we can find positive evidence of a disturbance in the individual's emotions in the past or in the present. The physician must be prepared to spend sufficient time to be sure of the diagnosis and of the actual development of the illness of that particular patient. One should have a thorough acquaintanceship with the person's problems, his assets and his liabilities. Engaging in a frank discussion of all his problems and giving the patient an opportunity to express himself, is the beginning of therapy and has been known as aeration or ventilation or purging. The physician must be, to some large degree, a listening post.

It is very important that therapy begin with the entrance of the patient into the doctor's office. A long initial interview and subsequent interviews have a decidedly beneficial effect because they instill confidence in the patient and make him realize that the physician has a definite interest in his problem and can give him prospective relief. With adequate examinations, explanations, and detailed analysis, the majority of patients will be able to see the real nature of their illness and have what is known as insight.

During my medical career, I have had an opportunity to witness many changes in treatment and in the attitude of physicians toward functional nervous conditions. I have had occasion to look back over the notes which I took in medical school in relation to the psychoneuroses. A psychoneurosis was defined as a state of hyper-irritability and hyperexcitability of the nervous system at that time and the treatment was to give a sedative such as bromides or barbiturates. In all, a 1-hour lecture was devoted to the psychoneuroses.

It was in the mid 20's that psychoanalysis or teachings of Freud began to take root in this country and gradually this type of treatment began to be popular. A limited number of patients can be treated by psychoanalysis. The objection to the treatment is that it takes too long a time and is too expensive for the average individual. The emotional conflicts of the individual's past life which have been buried in the sub-conscious, are brought to the surface and discharged or transferred to the examiner.

Treatment

There have been all sorts of treatment proposed for the psychoneurotic type of personality. Many people still seek out the chiropractor or osteopath for treatment. Some ten years ago, or more, the so-called progressive relaxation type of therapy was instituted by certain practitioners. In this treatment, the patient comes to the doctor's office, lies on a bed and the doctor gives the patient instructions as to the relaxation of the muscles of his body, starting in the lower extremities and than progressing up over the entire body. In other words, he points out the various muscles of the body and asks the patient to relax one muscle after another.

In 1936, Monas first reported the technique used and the results obtained in twenty cases of prefrontal lobotomy. Since that time there has been a large number of reports by neuropsychiatrists and neurosurgeons in this country as to the results which they have obtained in prefrontal lobotomy. Freeman and Watts have pioneered the operation of prefrontal lobotomy for the anxiety neuroses. We have had prefrontal lobotomy done in many stubborn cases of the anxiety states where the condition has rendered the individual useless from both the economic and social standpoint. Excellent results have been obtained in many of these cases, but, unfortunately, a small percentage have shown poor results and one never knows prior to the operation as to just what the results will be. It is, therefore, very essential that a very conservative attitude be taken toward this type of psycho-surgery in any given case.

During World War II, narco-analysis or narco-hypnosis was first used on a rather large scale. The patient lies on a bed or table and the physician injects a small amount of sodium pentobarbital or sodium pantothal into the patient's vein. The patient does not go entirely to sleep but only a sufficient amount is injected to produce a state between being awake and being asleep. This state is spoken of as the twilight state or the dream state. It is quite similar to the first stage of general anesthesia.

In this state, the patient will talk and, if given a few directions by the physician, he will relate many of his emotional conflicts of early life. It is possible to keep a patient in this semi-sleep state for as long as an hour to two hours and permit him to talk during this period.

It is surprising how many hidden emotional problems will be related by the patient during this period. When he awakens, it is the duty of the physician to discuss all these emotional problems with him, to analyze them for him, and to put them together for him. This is called narco-synthesis. Usually the patient awakening has no memory of the emotional conflicts which he has discussed with the physician during the narco-hypnotic or narco-analytic state. It has been considered a rapid form of psychoanalysis and has been of great value in the treatment of many hundreds of patients in our hands. It can be repeated any number of times without any danger to the patient. However, it should be in the hands of a well-trained psychiatrist and should not be used indiscriminately, or without discretion.

Electric convulsive shock therapy has also

been used in the treatment of the psychoneuroses and the anxiety states. However, we have found that electric convulsive shock therapy is of little value in the treatment of the neuroses unless there is an associated pathological depression of some degree. Sometimes following an electric shock treatment the patient will discuss some of his emotional conflicts when he is awakening from the shock treatment.

In closing, I want to point out to you that nervousness or the increased nervous tension state is fundamentally based upon conflicts in the hidden or buried emotions or conflicts that are present on the conscious emotional level. It is these emotional conflicts that produce insecurity in the lives of individuals and cause all of these various symptoms to appear in various parts of his body. It is the duty of the physician to delve into the individual's life and skillfully root out these emotional conflicts which have been buried in his past life or which are present at the present time on a conscious level. This may be accomplished by psychoanalytic study, by narcoanalysis and narco-synthesis, or by straight psychotherapy. The use of the sedative is only a crutch during the period when the physician is making his thorough and complete search.

As has often been said, "Reason rules the head but emotions rules the stomach" and the butterflies will not leave our stomach until the emotions have been straightened out and understood.

LeROY VERNON KAUFMAN 1916-1954

Dr. LeRoy Vernon Kaufman was born July 30, 1916 to Benjamin J. Kaufman and Lydia (Schmidt) Kaufman in Freeman, South Dakota.

He received his elementary schooling in different schools where his father was a teacher. He was baptized September 23, 1934 in Salem Zion Church by Rev. A. Waltner. He attended Marion High School and graduated from Freeman Junior College. He finished his premedical education in the University of South Dakota and obtained two years of his medical training. He graduated from University of Cincinnati in 1940 with M.D. degree. He interned at St. Francis hospital in Wichita, Kansas. He worked with Dr. Thor Jager in Wichita, Kansas until called to the Army.

In 1942 in Wichita, he was united in marriage to Marjorie Sawtelle.

He gave three and one half years in the care of the sick and wounded in the service of his country.

In 1945 he returned to practice medicine in Wichita, Kansas. In September of 1951 he brought his family to Freeman to join his brother in partnership in the practice of medicine.

He had given his years of life in the service of his fellowmen. He was very sincere and conscientious and felt a very keen interest and concern over the condition of his patients. He shared their joys as well as their sorrows.

He became ill and died suddenly on Tuesday, June 8, 1954 in Sioux Valley Hospital in Sioux Falls, South Dakota at the age of thirty-seven years, ten months and nine days.

He is survived by his wife, Marjorie, two young daughters, Crystal and Cynthia, his mother, his sister, his brother, two sister-in-laws, two brother-in-laws, his mother-in-law, six nephews, three nieces, and many aunts and uncles.



Just what is expected of me as a member of this Committee? This question has been asked so often that it is surprising that no one has coined an acceptable stock answer.

As is well recognized the success of any association is directly proportional to the functioning of its committee members. The old adage that the chairman acts as the committee and that the rest of the members are carried only as ballast is certainly not well founded. As far back as our memories carry us, committees have been subject to pungent criticisms, most of them unfounded. Committee members in our society serve without financial remuneration and at times at a great personal sacrifice. We must remember that the time these individuals devote to activities of our association is given only



with the thought of serving our profession and the public in general. The amount of work entailed in conducting the affairs of an organization such as ours is too great for any small group to conduct. Hence the necessity of **Working** Committees that will cope with problems as they arise.

The committee chairmen and committee members will be announced in the next issue of the Journal. I hope we need not agree with the chairman who in his annual report stated: "In most kindred associations half the committee"In most kind associations half the committee nothing. I am pleased to place on record that in my committee it is just the reverse."

A. W. Spiry, M.D. Mobridge, South Dakota



THE IMPORTANCE OF RELAXATION

All physicians realize the importance of relaxation and that stress and strain cause changes in the circulation. However, many of us fail to apply that knowledge to our own personal lives.

In the April issue of Therapeutic Notes the principal causes of death in physicians were listed in a comparison with white males in the general population, aged 25 and over. Intracranial lesions of vascular origin, diseases of the heart and coronary arteries and arteriosclerosis all had a definitely higher ratio of death rates in U. S. male physicians than U. S. white males in the general population.

In the June issue of Industrial Medicine and Surgery, Dr. Louis N. Katz of the Cardio-vascular Department of Michael Reese Hospital in Chicago, publishes an interesting article on "What Stress Does to the Heart." He states that stress is something which is excessive and can lead to distress, and that he considers "stress is to be used in the generic sense of a force or combination of forces, physical or emotional, which takes a place, or puts a load, upon the heart — to which the heart responds. The heart may be normal or diseased and its response may be different under these two circumstances.

The whole circulation is adjusted to meet stresses. While the heart is a remarkable pump, it nevertheless has limits to its effective responses to stress. Mental anxiety may cause just as much stress and strain as strenuous physical work, and one must consider not only the amount of work but also its rate. As Dr. Katz puts it, "It is not so much how high we climb the stairs, but how fast."

So the importance of relaxation, both mental and physical, is obvious. Whether the phy-

sician obtains his relaxation from golf or fishing, reading or card-playing, or just resting, is not so important. The point to remember is that physicians, because of the stress and strain of their work, should not neglect to have their regular periods for relaxation. Summer is vacation time. Relax, but don't overdo it.

THE MONTH IN WASHINGTON

The controversial health reinsurance issue* has come back into prominence, and under conditions that make the whole question about as complicated as it can get. The bill would have the federal government underwrite voluntary health insurance plans if they agree to experiments with risks not usually covered.

Although this measure is a major part of President Eisenhower's health program, it became bogged down in the House Interstate and Foreign Commerce Committee when widespread opposition developed. Then the committee chairman, Rep. Charles E. Wolverton (R.-N. J.), turned to one of his favorite subjects, a plan for federal guarantee of private loans to health facilities for construction and equipment. This bill, however, was not supported by the administration.

In an effort to placate the opposition, Mr. Wolverton offered to eliminate a number of objectionable features from the mortgage guarantee bill. At the same time there were reports that he proposed to merge this bill with the administration-supported reinsurance bill. Meanwhile, Henry J. Kaiser made two special trips to Washington to help out his friend, Mr. Wolverton, by putting his weight behind the mortgage loan idea. That

* Up for vote since this went to press.

was not surprising, inasmuch as Mr. Kaiser had helped to draw up the bill, which would greatly benefit health centers such as those started on the West Coast by the Kaiser Foundation.

Mr. Kaiser, saying he was producing a film to promote the mortgage loan plan, went to the unusual extent of making a direct appeal to Washington news correspondents to write favorable copy about the bill.

While these Wolverton-Kaiser maneuverings were taking place on the mortgage bill, it became apparent that President Eisenhower was not ready to abandon the reinsurance idea. He called a number of executives of major life insurance companies to the White House to try to impress them with the merits of reinsurance and in other ways indicated he still wanted to see the bill passed this session. Secretary Hobby, whose original testimony for reinsurance had been restrained, also joined in the last-minute campaign. But it appeared the tangle might be too complicated even for Mr. Eisenhower to unravel before adjournment.

Most other parts of the Eisenhower health program were moving through Congress, even though some were off schedule. (Of the major bills, AMA opposes only reinsurance). Legislation to expand the Hill-Burton hospital construction cleared what might have been a serious obstacle when it was reported out by the Senate committee. Compared with the House bill, the Senate bill gave more discretion to state health authorities in use of funds for constructing facilities for the chronically ill, for nursing homes, and for health centers. However, the Senate would require that funds earmarked for rehabilitation centers be used for the stated purpose. The Senate also would rule out the possibility of U.S. grants to centers devoted solely to treatment. Unless the facility could qualify as a diagnostic center, or a diagnostic-treatment center, it could not be eligible under the Senate bill. This safeguard was not in the House bill.

Of the remaining legislation of interest to the medical profession, the status at this writing was about as follows:

The doctor draft amendment, to strengthen Defense Department's hand in dealing with physcians who might be security risks, had passed the Senate, been reported by the

House committee, and was almost a law. Also about to be enacted was a provision liberalizing medical expense deductions from taxable income. The long-dormant bill to transfer responsibility for Indians' health matters from the Indian Bureau in Interior Department to Public Health Service in the Department of Health, Education, and Welfare was pointed toward enactment, but might possibly be held up by objections of Senators from a few western states. The Interior Department had dropped its original objection.

The House-passed social security bill, with the compulsory coverage of physicians eliminated, was before the Senate Finance Committee, where anything could happen. Two bills of medical interest already had been passed by both houses and signed into law. One prohibits the shipment of fireworks into a state where fireworks are illegal, and the other relieves Army medical officers of the technical responsibility for supervising preparation of food.

A reassuring note was sounded by President Eisenhower when he forwarded to Congress the controversial International Labor Organization convention on minimum standards of social security with a recommendation that it not be ratified. His message said most of the points - including a suggestion for socialized medicine - were not proper subiects for the Congress to deal with.

MEDICAL BOOKSHELF

Cardiovascular disease is the major cause of death among all and between the ages of 35 and 54 heart and circulatory diseases cause 35.4% of all deaths. Much of the existing knowledge could be used more extensively by the practicing physician for the benefit of his patients, particularly the new discoveries of the past few years. The following are a few recent books and journals on cardiology.

Clinical auscultation of the heart by S. A. Levine and W. P. Harvey. Saunders, 1949.
Correlates ausculatory phenomena and their phonocardiographic registration.
Clinical cardiology by Franklin C. Massey. Williams and Wilkins, 1953.
A special feature in addition to the representation.

liams and Wilkins, 1953.

A special feature, in addition to the representation of the heart and its functions in regard to the total organism, and laboratory aids such as roentgenology and electrocardiography are the sections on pediatrics, metabolism, surgery, anesthestology, obstetrics and psychiatry. Sections are also included on congenital heart disease, cardiac surgery and

rheumatic cardiac problems. Special emphasis on clarity and accuracy of diagnosis followed by selection and intensiveness of corrective measures.

Clinical disorders of the heart beat by Samuel Bellet. Lea and Febiger, 1953. Physiology and pathology, etiology, sym-ptoms and physical findings in various disorders. Discussion of most commonly used drugs. Highly recommended to all interested in medical aspects.

Electrocardiology by G. E. Burch. Lea and Fe-

biger, 1949.

Intended for beginners in electrocardiography but valuable to the graduate physician for reorientation. Describes principles and various components of the electrocardiogram in an understandable way. Good diagrammatic ilustrations.

Heart and circulation; diagnosis and treatment

by Meyer Sclar. Froben, 1953.

A complimentary copy was sent to this library by the author. It is written especially for the general practioner and the medical student and includes diseases of the heart and of the muscular tree. The final chapter is on therapy and prophlaxis.

JOURNALS

The South Dakota Heart Association sent us a complimentary subscription to the Heart Bulletin which is designed for the physician in general practice. The cover of the March-April, 1954 number, has an attractively collored portrait of William Harvey.

The February issue contains an article by Samuel A. Devine on ausculation of the heart describing heart sounds using the stethescope and giving practical suggestions for clinical observation.

A dramatic and significant article was written in the New England Journal of Medicine 247:768, 1952., by P. M. Zoll. This is about resuscitation of the heart in ventricular standstill by external electric stimulation and describes the successful use of the electric

pacemaker in 2 cases where the heart was aroused.

MOTION PICTURES

A valuable study for the evaluation of films in the cardiovascular diseases is the volume put out by the Medical Audio-Visual Institute of the Association of American Medical Colleges. Among the many films reviewed is one on Resuscitation of patients who die in the operating room and suitable for surgeons, medical students, interns and residents. It is distributed by the Department of Surgery of Western Reserve University School of Medicine, 2109 Adelbert Road, Cleveland, Ohio. G. D. Searles and Co., P. O. Box 5110, Chicago 80, Ill., will loan a 16 mm. sound, 35 min. film on the heart; cardiocascular pressure pulses and electrocardiography to medical societies. The first section by Dr. Carl Wiggers depicts origin, significance and relationships between cardiac function and pressure developed within the heart chambers and great vessels and basic relationship between cardiac contraction and corresponding waves of the electrocardiogram. The second section, electrocardiography, illustrates principles of precordial and indifferent electrodes in taking electrocardiograms.

PHONOGRAPH RECORDS OF HEART SOUNDS

Heart Beat record. Send to Columbia Recording Corp., Bridgeport, Columbia. Nos. 12001-D to 12009-D. Explanation introduces each illustration to point out its significant features and to suggest what to listen for. Good for physician who needs a "refresher."

CALEB FISKE FUND

The Trustees of what is considered America's oldest medical essay competition, the Caleb Fiske Prize of the Rhode Island Medical Society, announce as the subject for this year's dissertation "MODERN DEVELOPMENTS IN ANESTHESIA." The dissertation must be typewritten, double spaced, and should not exceed 10,000 words. A cash prize of \$250 is offered.

For complete information regarding the regulations write to the Secretary, Caleb Fiske Fund, Rhode Island Medical Society, 106 Francis Street, Providence 3, Rhode Island.

POLIO VACCINE TRIAL NEEDS PHYSICIANS' AID AS IT. MOVES INTO EVALUATION PHASE

More than 600,000 children have completed three inoculations, in the field test of the trial polio vaccine developed by Dr. Jonas E. Salk of the University of Pittsburgh. The emphasis now shifts to the evaluation study under the direction of Dr. Thomas Francis, Jr., University of Michigan School of Public Health. The validity of the evaluation is dependent upon data gathered on poliomyelitis cases in the test groups, including those children in the first three grades who did not get vaccine.

In addition, data on cases among family members of participating children are an integral part of the study. Since the number of poliomyelitis cases among the test groups may not be large, it is essential that all cases are completely reported. Early diagnosis, prompt reporting and follow-up, and the securing of necessary epidemiological information and laboratory specimens are important factors in the evaluation.

An outline of procedures and copies of necessary forms have been sent to local and state health authorities. It is important that physicians in areas where vaccinations were not given, cooperate in the study by notifying local or state health officers of cases occurring among children who participated in the trials and then migrated to another area and children who go to summer camps. Local health officials also need information on participating children who receive injections of Gamma Globulin.

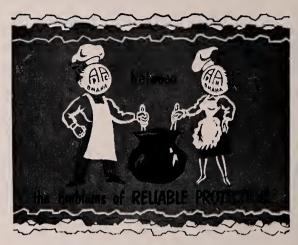
This phase of the study will depend, to a large degree, on the wholehearted cooperation of practicing physicians.

UROLOGY AWARD

The American Urological Association offers an annual award of \$1,000 (first prize of \$500, second prize \$300 and third prize \$200) for essays on the result of some clinical or laboratory research in Urology. Competition shall be limited to urologists who have been graduated not more than ten years, and to men in training to become urologists.

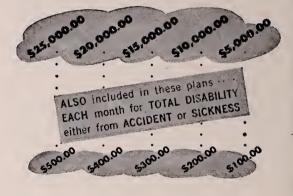
For full particulars write the Executive Secretary, William P. Didusch, 1120 North Charles Street, Baltimore, Maryland. Essays must be in his hands before January 1, 1955.

Something NEW is Cooking



MORE INSURANCE NOW AVAILABLE

TRUCKS HOW THESE AMOUNTS WOULD HELP IN PAYING ESTATE TAXES IN CASE YOU ARE ACCIDENTALLY KILLED...



SPECIFIC BENEFITS ALSO FOR LOSS OF SIGHT.
LIMB OR LIMBS FROM ACCIDENTAL INJURY
HOSPITAL INSURANCE ALSO FOR OUR MEMBERS AND THEIR FAMILIES.

\$4,000,000 Assets \$20,000,000 Claims Paid 52 Years Old

Physicians Casualty & Health Ass'ns.
Omaha 2, Nebraska



This is your MEDICAL ASSOCIATION

SOUTH DAKOTANS VISIT AMA

Many South Dakota doctors put in appearance at the annual meeting of the American Medical Association in San Francisco, June 21st to the 26th. According to registration figures which may not be complete, the following South Dakota Doctors were attendants: Wayne Gieb, A. A. Lampert, D. S. Berkman, H. J. Grau, M. P. Merryman, R. C. McCroskey, P. H. Koren and M. L. Spain, all of Rapid City; C. J. Mc-Donald, M. S. Grove, E. E. Greenough, S. F. Becker, T. J. Billion, Jr., L. M. King, Jr., and A. K. Myrabo all of Sioux Falls; H. Russell Brown, C. R. Stoltz, and C. J. Clark all of Watertown; A. P. Reding, of Marion; J. N. Hamm of Sturgis; R. G. Mayer and J. L. Calene, of Aberdeen; A. P. Peeke of Volga; D. C. Austin of Brookings; R. F. Foley of Tyndall; and V. Janvas of Willow Lake; and S. W. Haas of Yankton.

CIVIL DEFENSE IS AMA SUBJECT

A conference on Medical Civil Defense was held on June 20th 1954 at the Palace Hotel, in San Francisco. Attending the meetings which were concerned with the problems of medicine in case of all out war were: Wayne Gieb, M.D. of Rapid City and John Foster, Executive Secretary of the S. D. Medical Association, representing the state of South Dakota.

OFFICER CONFERENCE HELD IN S. F.

The Conference of Presidents and other officers of state medical associations was held at the Palace Hotel in San Francisco on June 20th. Representing South Dakota meetings were: A. A. Lampert, Councillor from the 9th District and alternate AMA Delegate; R. G. Mayer, M.D., immediate Past-President of the Association and John C. Foster, Executive Secretary.

NEWS NOTES

Dr. R. R. Ross, who practiced in Canova from 1947 to 1949 and then practiced in Lake Preston briefly, passed away at the age of 38 in Phoenix, Arizona.

Dr. Magni Davidson has been reappointed to the Board of Medical Examiners for a five year term by the Governor Sigurd Anderson.

Dr. Matthew Weir of Madison has accepted a residency in Pontiac, Michigan in Internal Medicine.

Dr. Wendell White formerly at Faith, South Dakota, has associated himself with Dr. Gus Torkildson at Mc-Laughlin, South Dakota.

EXAMINING BOARD HOLDS MEETING

The Board of Medical Examiners holds its regular summer meeting this week at Vermillion, South Dakota. The dates for the examinations are set for the 20th and 21st and will be held at the Medical School Building. Members of the Board will interview applicants for licensure by examination the first meeting July 20th and then be followed by interviews of applicants for reciprocity. The examinations will be conducted for the two full days with the actual board meetings ending at noon of the second day.

COURSE IS OFFERED U. MED. SCHOOL

The University Medical School is sponsoring a short course devoted to antibiotic sensitivity testing July 26 through the 30th.

Registration fee is \$5.00. This course is offered by Dr. Charles D. Cox, Professor of Micro-Biology.

Doctor Cox indicates that the course is primarily offered for technicians or other medical personell to provide proficiency in performing anti-biotic sensitivity testing.

For further details those interested in attending contact either Doctor Cox or D. R. Falk, Director of Extension at the University.

DR. F. O. KELSEY RECEIVES GRANT

A 22-thousand-500 dollar award for teaching and research has been received by a University of South Dakota woman professor from the Lederle (LED-er-lee) Laboratories. Dr. Frances O. Kelsey, associate professor of Medicine is one of the first to receive the huge sum under a plan by the drug manufacturing firm to support teaching and research activities. Her project will include instruction of medical students in physiology and pharmacology as well as to continue research in the field of cardiovascular disease and endocrinology. Dr. Kelsey is a native of Canada, and has studied at McGill University in Montreal and the University of Chicago. She completed a rotating internship at Sacred Heart Hospital, Yankton, and joined the University of South Dakota medical school staff this year.

Part of Dr. Kelsey's research is concerned with the use of radio isotopes for diagnosis and therapy. The University of South Dakota has the only laboratory in the state authorized by the Atomic Energy Commission to use radio-active isotopes for such purposes.

ICS MEETS IN CHICAGO

The Nineteenth Annual Congress of the United States and Canadian Sections of the International College of Surgeons will be held in Chicago, with headquarters at the Palmer House, September 7 through 10, with advance registration, business meetings, and a meeting of the Woman's Auxiliary on Labor Day, September 6.

The general chairman of the Congress is Dr. Raymond W. McNealy of Chicago and the co-chairmen are Doctors Karl A. Meyer of Chicago and Lyon H. Appleby of Vancouver. Honorary chairman of the program committee is Dr. W. W. Babcock of Philadelphia: the chairman is Dr. Peter A. Rosi of Chicago, assisted by Doctors Alexander Brunschwig and Horace E. Avers of New York; Moses Behrend and Harry E. Bacon of Philadelphia; Henry W. Meyerding and William Carpenter CacCarty, Sr., of Rochester, Minnesota; Arnold S. Jackson of Madison, Harry A. Oberhelman of Chicago, and Curice Rosser of Dallas.

General assemblies will be held on the four mornings and afternoons. They will be addressed by prominent surgeons, a number of them coming from South American and European countries.

INCREASED INTEREST IN MEDICAL GENETICS

Increasing emphasis is being placed on the teaching of medical genetics, a onceneglected subject in medical schools. Dr. C. Nash Herndon, associate professor of medical genetics at Bowman Gray School of Medicine of Wake Forest College writes of the awakening interest in applying genetic principles to medical problems, in the July issue of The Journal of MED-ICAL EDUCATION.

Medical genetics, while still largely integrated with other courses, is now taught in about 55% of the medical schools in the United States and Canada, according to the results of a 1953 questionnaire. The idea of teaching genetics as a science only became established in the medical curricula in the 1930's, Dr. Herndon points out. The comments on the questionnaire indicated a widespread interest in improving and broadening the teaching of medical genetics.

At Bowman Gray the subject is taught in two sections, under the department of preventive medicine. A course in basic principles consists of 12 lecture hours in the first quarter of the second year combined with pathology, physiology and michobiology. The second half of the course is called "hereditary disease" and is given during the third year. Dr. Herndon states that at Bowman Gray "we try to make our students aware of genetic factors in disease and to teach them to utilize the available information."

More strains of
gram-positive organisms
and sensitive to
Than to any other
systemic antibiotic
in Common we



Specify Lilly, the originator of Erythromycin:

Tablets No. 7, 'Ilotycin,' Crystalline, 100 mg., specially coated, in bottles of 36 and 100; Tablets No. 23, 'Ilotycin,' Crystalline, 200 mg., specially coated, in bottles of 24 and 100.

WE ARE A LILLY DISTRIBUTOR

BROWN DRUG COMPANY

Sioux Falls, South Dakota



THE MODERN PHARMACEUTICAL INDUSTRY*

by John F. Bohmfalk, Jr., Clark, Dodge & Co. New York, N. Y.

The Distribution Chain Lengthens

Fifty years ago local drug houses sold their medicines directly to the physicians, most of whom were general practitioners. As every doctor did some dispensing of drugs from his black bag, and many did their own compounding, the drug companies were forced to carry fairly complete product lines to service the medical men. The distribution chain lengthened at a later date with the advent of drug stores. Physicians were permitted as a trade courtesy the free run of the drug stores and filled their little bottles from the druggists' supplies.

Today, the distribution chain has lengthened very materially. Modern concepts of distribution start with the chemical manufacturer and the ethical drug producer, pass on to the drug wholesaler such as McKesson & Robbins or to large drug consumers such as hospitals and drug chains, and then to retail drug stores (or the physicians in the case of some medicines) at which point the consumer finally gets the drug. Perhaps as much as 90% of medicines sold today are formulated, compounded, and packaged by the manufacturer.

merchandising chain is wondrous to behold. For example, there are many antacid preparations whose factory cost is said to be only about 10% of the selling price at the retailers'

The economic functioning of this unwieldly level. Even as a general average, major drug companies experience a selling cost of at least 20% of sales on products detailed to physicians. The wholesaler adds roughly a 20% markup to the manufacturer's price, and the retailers add their 50% to the wholesaler's price. Thus, on the average, the industry's factory cost equals about 30% of the cost to the consumer, or put another way, the cost of distribution takes at least 50 cents of each prescription dollar. Undoubtedly, the Federal Government adds to these merchandising costs by taxing earnings at steep rates; on the other hand, Fair Trade laws buttress profit margins at the retailers' level. It is significant that prescription items, which account for slightly over 20% of total sales of independent druggists, are the most profitable, single group of products sold. Actually, the significance of Fair Trade drug prices is simply in the protection offered to the important retail drugstore link in the distribution chain by forcing adherence to Fair Trade price minimums set by the manufacturer.

Basic Sales Considerations

Essentially, distribution of drugs may be divided into two divisions: new drugs which treat a wholly new field of therapy, and which are obviously superior to anything else on the market (e.g. cortisone for rheumatoid arthritis); and competitive drugs, either trade-marked or not, which are identical for all practical purposes, with a number of drug products for a specific type of illness (e.g. penicillin, barbiturates).

Since a good new drug sells itself, distribution problems for this type of product are often concerned with allocation of the drug.

^{*}Reprinted from Chemical and Engineering News American Chemical Society, Vol. 31, page 4182, October 12, 1953. Copyright 1953 by the American Chemical Society and reprinted by permission of the copyright owner. #No. 2 in a series.

But the distribution problems for competitive drugs are of a very fundamental nature. To begin with, drugs are consumer, nondurable goods, consumption of which is limited by the incidence of disease or malaise. While there is room for expansion of sales by the "two aspirin bottles for every house" approach, not every house had two bathrooms to accommodate an enlarged supply of aspirin. Consequently, the distribution problem boils down in some respects to the battle of dividing up the market.

In this struggle, a differentiation should be made between trade-marked products and those which are not protected by a trade name. Penicillin is the leading example of the latter type of drug product. Then again, drugs which are protected by product patents, such as the broad spectrum antibiotics, occupy another stratum in the pharmaceutical trade. The level of the competitive struggle depends entirely on the patent and trade-market structure for each particular group of products. In the case of a nonpatented, nontrademarked product as penicillin, the use of knee and elbows in making a sale is the most legitimate aspect of the business.

Techniques of Distribution

As a point of departure, the Eli Lilly methods of selling are highly organized and unique in the drug trade. Sales are made only to wholesale druggists, some 250 in all, to whom Lilly has granted distributorships. Lilly merchandise is purchased at a discount of 16 2/3%, plus 5% for dispensing Lilly goods on unspecified orders. In spite of Lilly's special methods, the company keeps in close touch with the medical profession with a detail force of 830 men in the United States alone. Such a system affords Lilly the wide distribution and selling efforts of the wholesalers, buttressed with the direct selling pressure brought to bear by the Lilly detailing force.

Lilly has a select list of drug wholesalers, each one of which is a full line wholesale house carrying an average of 60,000 items in stock. The wholesalers' salesmen may be familiar with 20,000 items as a rule, and are expected to promote the wholesaler's own line of elixirs, cough medicines, aspirin, and other volume proprietaries as well as the ethically promoted products. Since Lilly spe-

cialties as insulin, vitamins, Seconal, and Ergotrate, together with its full product line sell very well at better than average profit margins to the wholesaler, they are a preferred line with the wholesalers. But this is only half the battle. Along with its chief competitors, Lilly's salesmen make frequent calls on doctors and drug stores in their area, more perhaps as a service and good will gesture than anything else. These calls on the medical profession, supplemented with direct mail campaigns to the doctors, is probably the

ESTIMATES OF DISTRIBUTION DATA— Domestic Operations

Number of

Full Line Drug Companies	Detail Men
Abbot	600
Lilly	830
Parke, Davis Sharp & Dohme	750 450
Sharp & Dohme	630
Squibb	800
Upjohn Wyeth	610
wycui	
Total	4670
Specialty Drug Companies	155
Ayerst, McKenna & Harrison Ciba	185
Cutter	100
Hoffman-La Roche	225
Lederle	590
Schering	$\begin{array}{c} 170 \\ 225 \end{array}$
Searle Smith Vline & French	80
Smith, Kline & French Warner-Chilcott	125
Winthrop-Stearns	400
(V-22-0-2-)	
Total	2255
Fine Chemical Companies	220
Merck Pfizer	500
1 11261	
Total	720
Estimated Industry Total	7645
Ethical	Sales per Detail Man
Drug Sales \$ 52 million	\$ 87,000
90	108,000
63	84,000
35	77,000
55	88,000
75 60	94,000 98,000
\$430 million	\$ 92,000 \$ 93,000
\$ 14 million	\$ 93,000
17	92,000
11 27	110,000 120,000
65	110,000
15	88,200
21	92,000
24	300,000
13 24	104,000 60,000
Z '	
\$231 million	\$102,000
\$ 18 million	\$ 82,000
37	75,000
\$ 55 million	\$ 76,000
\$716 million	\$ 93,700
,	, 2,
_	

least eccentric part of merchandising in the drug industry. However, there is considerable disagreement as to requirements in a detail man. A few firms prefer registered pharmacists, other prefer the huckster type; detail men of most drug firms, however, cultivate members of the medical profession in their assigned areas, with the realization that the demand for ethically promoted pharmaceuticals originates at the doctors' level. Good will and reputation thus engendered filters down in the form of increased sales of products to druggists. There is some dispensing still done by physicians; generally, doctors are inundated with free samples, a practice to which the medical profession has become "resigned." W. L. Arscott of Squibb, in fact, mentioned at the recent Chicago meeting of the American Chemical Society that major drug houses provide each salesman with an average of \$1,100 worth per year of free samples, totalling about \$20 million per year for the industry for both field and mail sampling.

Direct mail campaigns, for the purpose of advertising a product, have reached flood proportions, with the result that doctors maintain an overflowing circular file of such material.

Direct Selling

In contrast to the wholesaling approach, other firms such as Abbott, Parke-Davis, Squibb, and Upjohn primarily employ direct selling techniques and all that such a system implies: elaborate merchandising gimmicks, such as displays; a great number of accounts, numbering in the tens of thousands, which must be serviced; the problem of credit and collections; and the maintenance of regional warehouses and distribution points. Nevertheless, a certain portion of the sales of these companies does pass through established wholesale outlets.

Proponents of direct selling claim certain advantages over wholesaling distribution. Direct selling is more flexible, as is perhaps demonstrated by the frequent changes encountered in distribution policy to meet a change in the market or in a competitive situation. Because selling is so highly competitive in the drug industry, some firms are exceptionally liberal with "free samples," and indeed Lilly has to mollify the director of purchases for a hospital, for example, who complains that he gets two free packages with

each carton of 10 from certain other companies. Thus Lilly's rigid distribution system is not geared to what in effect is a 20% discount policy (of the moment) of its competitors.

Much of this free goods innovation in drug merchandising can be attributed to the penicillin price wars, which opened the drug business to more aggressive competition. Lilly, in efforts to meet this competition, has issued Supplement A Catalogue which permits the company to use price discretion in selling penicillin, presumably on bids to large users, but giving the wholesaler a free 10% ride on the sale. While Lilly has used such a method once before on another product (Ergotrate), it does emphasize the strength of the new forces entering the merchandising picture.

A second advantage claimed for direct selling is that the wholesaler's 20% discount is eliminated. Now a certain amount of this discount becomes Merchandising cost to the direct-selling drug company. As a reference point, it has been said that the cost of physical handling of drugs, cosmetics, and sundries by McKesson & Robbins (Fortune, July 1952), absorbs all but 15 cents of the average lot sale of \$3.75 each. If the costs of wholesaling the Lilly ethical line were available (they aren't), the profit would doubtless be be larger than the average 4% for all drug products. It is entirely likely that the wholesaler's profit on Lilly products is 5% or better.

The other side of the coin is the costs of distribution for the direct selling manufacturers. Parke-Davis has about 12 branch distributing warehouses located around the country; Upjohn has 14. By comparison with Lilly's 250 wholesalers, many of whom have several strategically located warehouses, the Parke-Davis and Upjohn costs (as representative of the full line companies) must reflect additional transportation charges from branch distributing warehouses to drug stores, losses on bad debts, and accounting services. But by comparison with the average wholesalers' discount of nearly 20%, the costs of the direct selling manufacturers probably average 14.5 to 15% of sales as compared with McKesson's 13% of sales. With this advantage, the direct selling companies can afford more liberal sampling, let us say, or in general they have some slight edge in margins.

In addition, a direct selling manufacturer can handle additional sales through his estab-

THE LOGISTICS OF SELLING

Amount

% of Total

National Gross Wholesale Drug Sales

50)3	42 26 25 7
\$201	10	100
Millions of 1939 166 1600	f Dollars 1951 746 4000	% Increase 350 150
		% Profit
0.63 0.13	38 5	17 4 2
		Millions of Dollars
		\$ 50 25 25 125 125 \$225
	50 13 \$200 Millions of 1939 166 1600 \$3.1 0.6 0.1	166 746

lished channels at only incremental costs. This system of direct selling, then, has certain economic advantages over indirect selling through wholesalers which cost 20% for each additional sale. Thus, wherever the squeeze appears, whether the manufacturer's, wholesaler's, or retailer's profit margins, the direct selling technique has a secure niche in the drug merchandizer's scheme of things.

Nature of the Problem

Product duplication has reached serious proportions. Druggists in some cases find it necessary to stock 12 to 20 brands of the same remedy, and indeed a single basic formula may be dressed up as a pill, capsule, elixir, powder, syrup, ointment, and drops. Naturally, manufacturers wish to establish their own brands but as Ernest Irons of the American Medical Association said recently, "competition among manufacturers has in the past sometimes tended to overshadow practical caution which should regulate promotion of new drugs."

Advertising promotion has been tremendously increased. For example, as the antibiotic market unfolded, competitive factors led Pfizer, a long time fine chemical producer and cupplier of medicinal chemicals o the drug

industry, into the ethical drug business itself. To establish the Pfizer label, the company embarked on a three-pronged program consisting of journal advertising, direct mail, and detailing, all conducted on a vigorous and aggressiv scale. This three-year program was largely completed in 1952, but the cost of securing a foothold in the ethical drug business was very high. Naturally, the rest of the industry viewed Pfizer's tactics with some misgivings, but many are willing to admit that, had the shoe been on the other foot, they would have approached Pfizer's problem in much the same way. There is some indication today that Pfizer is reviewing its selling costs to effect a better balance among the above three approaches. While Pfizer's tactics may be said to be successful in that the company's earning power was maintained during this transition period, only the future can tell the program's long range success.

In general, the drug industry has suffered through a number of crises in its past, many following the patter of today's antibiotic scramble. Barbiturate drugs are a good example, for at one time, there was severe competition for markets for the barbiturate hypnotics. As this situation has been resolved, Lilly's Seconal and Abbot's Nembutal are the

volume leaders, but other firms have established modest sales volumes returning a good profit on a much smaller scale. Perhaps Pfizer will maintain its antibiotic position by its production efforts and its vigorous competitive practices which may have been necessary in getting a foothold in the distribution of drugs and of holding a more or less permanent part of the market.

Recurring Competitive Crises

While history has a way of repeating, the explanation for the recurring competitive crises can be found in the facts that there are no dominant companies in the industry; that there is no monopoly on talent or on new discoveries; and that the industry, suffering from growing pains, is saddled with an expensive distribution system and buffeted with rapid technological obsolescence. All too often, fundamental economic factors affecting market for drug products are ignored in the hurly-burly of the market place. Drug products are generally characterized by conditions of inelastic demand, whereby price changes have a less than proportionate effect on sales volume. Yet the desire to maintain a competitive position is the overriding factor in the profitability equation, not the optimum return on the price-demand curve. The industry would agree, however, that the longrange benefits to the public are more than an incidental factor in lowering prices. More important, the benefits of price reduction to the company originating a new product rest in the fact that chances for maintaining its competitive position are enhanced by making the product less attractive profitwise to other potential producers.

The Future of Distribution

As a solution to the current profit squeeze

on the wholesalers, the officers of the National Wholesale Druggists Association suggested at a recent convention that drug manufacturers should either abandon direct sales or increase the minimum quantities required for direct shipment. In effect, they argued that wholesalers perform the distribution function at the same cost as the direct selling method and therefore should get more of the business. In support of this position, they cited the net profit after taxes (see table below) as a percentage of sales for the industry. When these estimates are converted to a profit on invested capital base, the results become significant.

Need for Orderly Market

Though distribution costs appear to be altogether too high, it is of inestimable value to have orderly markets and marketing arrangements, particularly for the pharmaceutical industry which relys heavily on tradition, prestige, and reputation. An overemphasis on selling effort to move products which have well-defined market limits has intensified the industry's growing pains. It is said that one Bacitracin producer has given away (in samples) as much of the product as it has sold. Obviously this indicates that the situation has reached an extreme point. The outcome of the distribution struggle will favor those companies which have most to offer in the way of unique, new products backed by a thorough, vigorous, and reputable selling effort. From long experience, management has determined that sales effort should be skillfully balanced among detailing, journal advertising, and direct mailing so as to secure maximum results at least cost. A gradual reorientation of selling programs (and certainly of institutional advertising) toward the lay public should be observed in the near future.

In justic to the wholesalers, there has been

MANUFACTURER, WHOLESALER, AND RETAILER PROFIT

	% of Sales		% of Invested Capital		
	1951	1952			Source
	11.5	9.6	1951	1952	
Drug Industry	1.9	1.7	16.3	12.3	Moody's
Wholesalers 1	4.4	4.	6.6	5.7	NWDA
Retailers	••		15.8	16.2	Lilly Digest

1NWDA survey includes drug sundaries as well as drugs, and profits on total assets instead of invested capital. Using the relationship between total assets and invested capital as shown in balance sheets of McKesson & Robbins, Inc., wholesalers' profit on invested capital becomes a calculated 8.9% and 7.7% for 1951 and 1952, respectively.

a notable trend in the past few years to indirect selling, particularly by such relatively small firms as G. D. Searle, Lakeside, A. H. Robins, and Sandoz. Certainly, the wholesalers have available the type of distribution organization to service the products of such firms at lower cost. Small manufacturers undoubtedly would experience higher costs in setting up their own facilities and contacts.

Essentially, merchandising must fit the markets to be serviced, and each selling method must be competitive in its economic function with other techniques. For example, direct selling appeals to large drug stores and chains which can take advantage of their bargaining power. Wholesale distribution, however, generally blankets the independent, neighborhood druggists.



South Dakota pharmacists take State Board Exam in new Division of Pharmacy Dispensing Laboratory.

STATE BOARD OF PHARMACY EXAMINATIONS HELD

A total of 56 men and women were examined for registration in pharmacy by the South Dakota State Board of Pharmacy, May 25-27, according to Board Secretary Bliss Wilson. Written examinations covering the several areas of pharmaceutical education were taken by 38 recent pharmacy graduates. The practical examination in prescription compounding and drug identification was taken by 27 pharmacists who had already completed the year apprenticeship required by law. The 27 included 18 who had passed the written exam in previous years and 9 who took both the written and practical this year, Wilson said.

The newly equipped Division of Pharmacy Dispensing Laboratory was used by the Board for the examination in Prescription Compounding. Written examinations, as in the past, were held in the Union Building Ballroom on the State College Campus.

DIVISION OF PHARMACY NEWS

Pharmacy Students in Advanced ROTC

Pharmacy students in the Advanced ROTC program at State College have received their assignments for summer camps. They will report to camp on June 19 and continue their training until July 30.

Junior army students going to general military science camp at Fort Lewis, Wash., include Richard Angerhofer, Twin Brooks; Kenneth Boyce, Windom, Minn.; Donald Hecht, Lakefield, Minn.; Clair Hetland, Arlington; Richard Lovaas, Gary; Marlin Radtke, Faribault, Minn.; Jim Swain, Rapid City; Bob Voy, Dell Rapids.

Richard Bloemke, Springfield, Minn., is assigned to the infantry camp at Fort Lewis.

Seniors attending the medical service corps camp at Fort Sam Houston, Texas, are Don Berg. Hills, Minn.; Donald Ekdom, Ireton, Ia.; Bob Ehrke, Groton; Marvin Erickson, Spearfish; Jerry Hahn, Doland; Robert Landes, Pierre; Todd Martin, Rapid City; Thomas Miller, Alpena; Jim Page, Sisseton; Allen Pfeifle, Beresford; Edward Staudenmier, Humboldt; Carveth Thompson, Faith; Murray Widdis, Sioux Falls; Maris Williams, Ipswich; and Robert Williams, Rapid City.

Division of Pharmacy Graduates 36

A total of 36 students were graduated with the B.S. in Pharmacy, May 24, at the 68th Annual Commencement exercises of the South Dakota State College.

The Armed Services took over half of the graduates with 19 who are either in the service now or who will be in the near future. The Army Medical Corp have commissioned 17 of these 19 graduates.

One of the graduates will study toward an advanced degree in pharmacy and 16 graduates have accepted positions in retail pharmacy. Those graduates who will practice the profession in South Dakota number 10, while 6 will practice in Iowa, Minnesota and Illinois.

Pharmacology Head Honored

Dr. Guilford C. Gross, Head of the Department of Pharmacology, was one of five instructors chosen for excellence in teaching in the annual State College outstanding teacher contest.

The award is based on the ability of the teacher to stimulate original thinking and create a desire on the part of the student to explore new areas, as well as on all-round ability and popularity. The choice is made by ballot with the alumni and senior class participating.

BROOKINGS AREA PHARMACISTS MEET

Mr. Louis Wyman, Director of Trade Promotions, Minneapolis Division of McKesson and Robbins Drug Company, spoke to 41 members and guests of the Brookings Pharmaceutical Society at a banquet, Sunday evening, May 24, at the Brookings Country Club. Mr. Wyman discussed store arrangement and the importance of drug store departments.

Conrad (Connie) Beastrom, SDSC 53, pharmacist with Kendall's Drug Store, Brookings, was elected secretary to fill the unexpired term of Dale Youells.

Several recent store remodelings have come to our attention through the courtesy of Glenn Velau, State Board of Pharmacy Inspector. Sioux Falls stores recently remodeled include the Dow Drug Co. and the Sioux Valley Drug. Both remodelings involved expansion with the Sioux Valley Drug adding new departments to serve the growing suburban Sioux Falls areas. In Rapid City, Beckers Drug Store was remodeled making this store one of the more modern in that area.

Bernard Tennyson, formerly with the Jones Drug Store, Custer, S. Dak., has accepted a position with Leonard Roudebush, Roudebush Drug, in that city.

Dale and Carol Youells, Walgreen Agency Drug, Chamberlain, are the proud parents of a baby girl. Dale was formerly with Kendall's Drug Store and Carol with the Shirley Pharmacy in Brookings. Your editor is also very happy to announce the arrival of a daughter, Gwen Ellen. The Baileys now have three girls.

AMERICAN PHARMACEUTICAL ASSOCIATION

101st Convention

The next annual meeting of the American Pharmaceutical Association will be held in Boston, Mass., August 22-27, 1954.

It is expected that sufficient accommodations will be available at the Statler Hotel in Boston, which is the Headquarters Hotel for the Convention, for all who wish to be assigned there.

The program will follow the customary arrangement, with three General Sessions, to be held on Tuesday evening, Thursday morning, and Friday evening, respectively, of the convention week.

At the first General Session to be held on Tuesday evening, August 24, President F. Royce Franzoni will give his presidential address, which will be followed by a reception and dance in honor of President and Mrs. Franzoni.

The Second General Session will be held on Thursday morning, August 26, and will include several addresses on topics of current importance by outstanding speakers. This session will also be marked by the award of the Ebert Prize, the Kilmer Prize, the Iodine Educational Bureau, Inc., Award, and the address of the President-Elect, Mr. Newell Stewart.

The five Sections of the Association will hold meetings for the reading of papers on Wednesday, Thursday, and Friday, August 25, 26 and 27.

As has been customary in previous years, the American Association of Colleges of Pharmacy, the National Association of Boards of Pharmacy, the American Society of Hospital Pharmacists, the American College of Apothecaries, and the National Conference of State Pharmaceutical Association Secretaries, will hold meetings on Sunday, Monday and Tuesday, August 22, 23 and 24 of the Convention Week.

Entertainment features will include the Annual Banquet of the Association on Thursday evening, August 26, and the customary entertainment features for the ladies throughout the Convention week.



Antirabies Serum

The first new agent for the preventive treatment of human rabies to be offered to the medical profession in the United States in 25 years, Antirabies Serum, has been made available by Lederle Laboratories Division, American Cyanamid Company.

The serum, recommended as an adjunct to the standard Pasteur treatment by vaccine injections, offers an extra margin of safety in the treatment of persons who have been exposed to rabies and will be especially welcome in cases of animal bites about the head and neck. Administration of Antirabies Serum in such cases makes protective antibodies promptly available.

In some cases the serum may also allow a shortening of the Pasteur vaccination course which routinely consists of a daily injection for 14 to 21 days. Rabies vaccine is prepared from the brain tissue of rabbits, and its injection into humans sometimes results in serious complications, particularly in persons undergoing the Pasteur treatment for the second time. Physicians recognizing symptoms of these severe complications now have recourse to Antirabies Serum.

Although the vaccine used has undergone some modifications, the Pasteur treatment has remained essentially the same since 1885. Antirabies Serum has been known experimentally almost as long. Its present commercial availability is the result of the work of Dr. Hilary Koprowski and his associates at Lederle Laboratories. Dr. Koprowski conducted experimental work with laboratory animals to demonstrate the effectiveness of this serum. Other Lederle workers developed

techniques for refining and concentrating the serum, which is derived from horses, and arranged clinical trials on human patients.

Clinical trials were begun in this country in 1948. Since then the serum has been administered to more than 200 persons, many of whom were bitten by animals later proven to be rabid. Among this group of exposed persons there have been no deaths from rabies. The only side effects observed were a few cases of "delayed serum sickness" type reaction, none serious.

Antirabies Serum Lederle is supplied in 1,000 unit vials.

New Armour Barbiturate Formula Adaptable to Tension Periods

Product: NIDAR, a new formulation of

sedative drugs by the Armour

Laboratories of Chicago.

Use: For individualized control of

tension peaks, through the combination of four barbiturates of varying periods and

onsets of actions.

Composition: Each light-green, scored

NIDAR tablet contains:

Secobarbital sodium % gr. Pentobarbital sodium % gr. Butabarbital sodium % gr.

Phenobarbital ½ gr.

Dosage: One tablet approximately one-

half hour before the period of morning tension, and one tablet approximately one-half hour before the period of afternoon tension. At night one or two tablets one-half hour

before retiring.

Rationale:

Efforts to relieve tension in most patients by the "blanket method of all-day sedation, which may result in over-drugging, are unwarranted, since tension usually occurs in peaks. NIDAR'S combination of short, medium, and long-acting barbiturates gives quick response and builds up o a peak with the period of tension. The result is sedation as and when needed, without over-dosage or drowsiness.

The rapid early response usually within 20 minutes is produced by the secobarbital. Deeper sedation comes as the slower-acting pentobarbital and butabarbital manifest themselves. About an hour after taking the tablet, phenobarbital begins to act. Peak action can thus be matched to peak tension and it begins to disappear in four to five hours. The need for relief from the tensions of modern living, with special reference to the daily tension "peaks" and the conditions which interfere with natural sleep. With NIDAR, the physician can tailor his prescribed sedation to fit the individual patient, applying it when needed and leaving the patient free of medication when not required.

How Supplied: In bottles of 100 tablets, in shipping cartons of twelve bottles.

New Penicillin Preparation

A new repository preparation of penicillin has been placed on the market by Lederle Laboratories Division, American Cyanamid Co. The new product — Ledercillin in Oil — is intended for deep intramuscular injection and permits the gradual release of penicillin in the tissues. Each cubic centimeter contains 300,000 units of penicillin G in sesame oil with 2% of aluminum monostearate added.

For the treatment of local or systemic infections caused by penicillin — sensitive organisms, Ledercillin in Oil is available in 10 cc.

vials.

Primoplex

Primoplex, a new geriatric liver and vitamins preparation, has been placed on the market by Lederle Laboratories Division, American Cynanamid Company.

Supplied in vials with 2 cc. ampuls of diluent, Primoplex is administered intramuscularly and is indicated for prevention and treatment of B complex deficiencies. It is a valuable adjunct in nutritional deficiencies of all ages and for pre-operative and post-operative supplementation.

Each 2 cc. dose contains:

Thiamine HCl (B ₁)	10	mg.
Riboflavin (B ₂)	10	mg.
Sodium Pantothenate	10	mg.
Niacinamide	50	mg.
Pyridoxine HCl (B ₆)	5	mg.
Ascorbic Acid (C)	200	mg.
dl-Methionine	50	mg.
Vitamin B ₁₂	15 m	egm.
Liver Injection Crude	2 m	gm.
Vitamin B ₁₂ activity	equivalen	t

to 2 mcgm. of cyanocobalamin
Cholin Chloride 150 mg.
Folic Acid 3 mg.
Inositol 20 mg.

Penasoid Suspension

What the Product Is—A stable suspension of potassium penicillin in coconut oil for oral use. A palatable, creamy preparation with butterscotch flavor, it does not require refrigeration.

What It's For—The treatment of most patients with diseases caused by penicillinsensitive organisms. It is especially adapted for treating children.

How Supplied—In 60-cc. bottles, 60,000 units of crystalline penicillin-G per cc. (300,000 units per 5-cc. teaspoonful).

Who Supplies It—Parke, Davis & Company.

BSP Liquid

A new bedsore preventive, proved effective in a series of hospital-conducted tests, is now being distributed under the name BSP Liquid.

The new product requires no rubbing. Because of the methylcellulose content, two simple applications a day usually provide a protective coating that makes affected areas impervious to air-borne bacteria.

Recommended for routine treatment of any patient who may develop bedsores, BSP Liq-

Indications:

uid dries rapidly and never becomes sticky. Bedclothes in contact with BSP-treated surfaces do not require special laundering.

BSP Liquid contains Ringer's solution, calamine and isopropyl alcohol. It is supplied in a four-ounce bottle by Otis E. Glidden & Co., Inc., Waukesha, Wis.

MEDICAL SERVICE CORPS COLONELS INCREASED

The President of the U. S. recently approved H.R. 5509, an Act to amend the Army-Navy Medical Corps Act of 1947 relating to the per centum of colonels in the Medical Services Corps, Regular Army.

H.R. 5509 was introduced for the purpose of correcting the discrimination which had crept into the Army-Navy Medical Services Corps Act of 1947, reading as follows:

"Provided, That the number of colonels on active duty in the Medical Services Corps, Regular Army, shall not exceed 2 per centum of the authorized Regular Army officer strength of that corps."

The objective of this bill was to repeal the foregoing proviso and thus permit the Medical Services Corps to have the same percentage distribution of full colonels as is now applicable to all other male corps of the Army. This is now about 8 per cent.

Pharmacists are commissioned in the Medical Services Corps of the Army, which includes the section on Pharmacy, Administration and Supply. The passage of H.R. 5509 and its approval by the President opens the way for permanent promotion to the grade of Colonel among the present commissioned pharmacy personnel in he Medical Services Corps.

This legislation was fostered by the Committee on Status of Pharmacists in Government Service, which includes representatives of the American Pharmaceutical Association, the National Association of Board of Pharmacy, the American Association of Colleges of Pharmacy, and the National Association of Retail Druggists.

The American Pharmaceutical Association endorsed this proposal by resolution at recent annual conventions and actively supported this legislation, filing briefs in its support with the appropriate committees of the House and Senate and executive departments of the government.

Many state pharmaceutical associations and individual pharmacists communicated with their congressmen and senators in behalf of this legislation, and it had the active support of the Department of Defense.

The next step will be to provide for general rank for the chief of the Medical Corps, so as to place this corps on an equal footing with the Medical Corps.

BUREAU STUDY FINDS LOW RATE OF DRUG STORE CLOSINGS IN FAIR TRADE STATES

Proportion of Drugstore Bankruptcies to Total Retail Bankruptcies Found Higher in Non-Fair-Trade Areas

The number of drug stores in non-fair trade areas declined by 11.6% in the six-year period, 1948-53, while the number of drug stores in fair trade states declined by only 2.5% in these years, Dr. John W. Dargavel, executive secretary of the National Association of Retail Druggists and chairman of the Bureau of Education on Fair Trade, revealed in releasing the results of a research study made by the Bureau.

The study also found that, in this six-year period, drugstore bankruptcies in the non-fair-trade areas represented 3.2% of total retail bankruptcies, whereas in the fair trade states, drugstore bankruptcies represented 1.2% of total retail bankruptcies, according to Dr. Dargavel.

"These findings refute the assertion made by opponents of fair trade that fair trade injures the small businessmen. Analysis of the figures for the entire country over the past six years shows that, over-all, the picture respecting the closings and bankruptcies of drug stores is better for states with fair trade laws than for the non-fair-trade areas. It is certainly possible to pick out isolated states in both fair trade and non-fair-trade areas in order to prove a preconceived assertion. But this assertion does not stand up when the total picture is examined," Dr. Dargavel added.

"The results of this study show once again that the fair trade laws to restrain unfair competition serve to give the efficient druggist and other independent businessmen a fair and fighting chance to compete with those possessing superior dollar resources. At the same time, the fact that there are failures under fair trade indicates that these laws in no way act as a crutch for the inefficient."

Using figures from the annual surveys of Drug Topics, the Bureau analysis found in the non-fair-trade areas, the number of drug stores dropped from 5,280 in 1948 to 4,668 in 1953 — a decrease of 612 stores or 11.6%. In the 45 fair trade states, the number of drug stores declined from 48,013 in 1948 to 46,793 in 1953 — a decrease of 1,220 stores or 2.5%. The figures reflect closings for all reasons, including bankruptcies.

In analyzing Dun and Bradstreet figures on retail bankruptcies for 1948-53, the Bureau study found that out of a total of 1,693 bankruptcies in all retail fields, in the non-fairtrade areas, drug stores accounted for 54 failures or 3.2%. In the fair trade states, out of a total of 46,486 bankruptcies in all retail fields, drug stores accounted for 566 failures or 1.2%.

The Bureau of Education on Fair Trade is a non-profit educational organization sponsored and operated by the National Association of Retail Druggists. The Bureau's objective is to develop public understanding and support of the fair trade laws as instruments of public policy.

LUNG NEOPLASMS—

(Continued from Page 209)

- 18) Iversen, J., False Postives in Pulmonary Cytodiagnosis, Nord. Med., 49:675-6, May 8, 1953.
- 19) Riess, J., Baum, G. L., and Koonst, M., The Early Recognition and Treatment of Broncho-genic Carcinoma, Dis. Chest, 22:529-38, Nov. 1952.
- 20) Farber, S. M., McGrath, Jr., A. K., Benioff, M. H., and Espen, L. W., The Early Diagnosis of Primary Lung Cancer by Cytological Methods, Dis Chest, 20:237-56, Sept. 1951.
- 21) May, I. A., Rose, K., and Dugan, D. J., The Solitary Pulmonary Lesion, California Med., 80:9—12, Jan. 1954.

- 22) Wachowski, T. J., What Are We Getting Out of Routine X Ray Chest Examinations of Hospital Patients, Illinois Med. J., 105:14-16, Jan. 1954.
- 23) Papanicolaou, G. N., and Koprowska, I., Carcinoma in Situ of the Right Lower Lobe Bronchus, Cancer, 4:141, Jan. 1951.
- 24) Craver, L. F., Diagnosis of Malignant Lung Tumors by Aspiration Biopsy and Sputum Examination, Surgery, 8:947-60, Dec. 1940.
- 25) Farber, S. M., Pharr, S. L., Wood., D. A., and Gorman, R. D., The Mucolytic and Digestive Action of Trypsin in the Preparation of Sputum for Cyologic Study, Science, 117:687-90, June 19, 1953.
- 26) Hengstmann, H., Cytodiagnosis of Bronchial Carcinoma with the Aid of the Precision Bronchial Aspiration, Zschr. klin. Med., 150:283-312, March, 1953.
- 27) Naumann, H. H., Critical Remarks on Cyto-diagnosis in the Bronchial Region, Munch. med. Wschr., 95:770-2, July 10, 1953.
- 28) Gladstone, S. A., Sponge Biopsy, A New Method in the Diagnosis of Cancer, Cancer, 2:604, 1950.
- 29) Florentin, P., Pierson, B., and Grilliat, J. P., Early Cyto-diagnosis of Broncho-pulmonary Cancer; Aspiration Directed by a New Devise; Cytological Aspects, Strasbourg Med., 3:416-18, June 1952.
- 30) Florentin, P., Pierson, B., and Grilliat, J. P., Early Cytological Diagnosis of Broncho-pulmonary Cancer by Directed Aspiration, Rev. med. Nancy, 77:519-23, Nov. 1952.
- 31) Cross, K. R., Corcoran, T. E., Cooper, T. J., and Landis, S. N., Bronchial Carcinoma, A Practical Method of Early Diagnosis, Arch. Path., 48:491-502, Dec. 1949.

EARLY CHOLECYSTECTOMY-

(Continued from Page 212)

- 7. Immediately postoperatively, Wangensteen suction, Postigmine and other local measures should be instituted to prevent paralytic ileus. Broad spectrum antibiotics should be continued for 2 or 3 days after fever has subsided. Early ambulation on the first postoperative day is advised.
- 8. Conservative medical management of acute cholecystitis alone, or with palliative types of surgery, such as cholecystostomy and sub-total cholecystectomy; or followed by deferred cholecystectomy, has a place in the management of those patients who have severe complicating diseases, associated with their acute cholecystitis, aged and debilitated patients and those patients who, for debilitated patients and those patients who, for these and other reasons, are considered very poor risks. However, in the hands of an experienced operator who has adequate and efficient medical and surgical facilities at his command, cholecystectomy in the presence of acute cholecystitis is thought to be a safe procedure.

 Rapid City Medical Center 728 Columbus Street
 Rapid City, South Dakota
 January 1954

PRESIDENTIAL ADDRESS

South Dakota State Medical Association Huron, S. Dak. — May 17, 1954 R. G. MAYER, M.D., ABERDEEN, S. D.

The By-Laws of the South Dakota State Medical Association require that the President deliver an address during the Annual Session, and for the past few years it has become customary to inflict this punishment upon the ladies as well as the members by having the President give his talk at the Annual Banquet. However, Oscar Wilde once said "After a good dinner, one can forgive anybody, even one's own relations," so perhaps the ladies will forgive me.

Last fall I attended a conference of physicians, public health officials and educators at Highland Park, Illinois, and one of the speakers was Professor Bergen Evans, of the Department of English at Northwestern University. He began by stating that a speaker should not be disappointed when he is misunderstood. He said "Most people are not listening. Of those listening, most don't understand. Of those understanding, only some agree. Of those agreeing, only a few remember. Of those who remember, only a few will ever be in a position to influence others. And of these, some will change their minds and some timidly remain silent." And so, with this cheerful and optimistic note let us pro-

To one who has practiced medicine for almost forty years, it is of intense interest and satisfaction to reflect upon the great progress of medicine during this time. Because of progress in medical science and improved conditions of life generally, our people enjoy longer and healthier lives then ever before. Man's longevity has increased from 40 to almost 70 years in these four decades. In 1916-38 years ago -- when I came to South Dakota to start practicing my profession, a little less than 4% (about 23,000) of the total state population of 595,000 were over 65 years of age. Last year (1953) with a population of 655,000, over 9%, almost 60,000, were in this age group. One out of every 13 persons in South

> *Delivered at the Annual Banquet Marvin Hughitt Hotel

Dakota is over 65 years of age — about 12 million in the nation. And Child Mortality has been reduced by more than 50% in the last 15 years.

In spite of this progress, to one who has been an active officer of our state medical association for the past 11 years, it is natural to ask the question "How Can The Medical Profession Best Serve The Public?" This question might be answered in many ways -By expanding medical education — by improving public relations — by following the Golden Rule — by keeping free from government controls, and so on. That Socialized Medicine is still a real threat is shown by the fact that the last Nation-wide Purdue University Opinion Poll of High School Students revealed that 55% of high school students still believe that the federal government should provide medical services for all the people.

Many years ago I heard a thought expressed which I believe is particularly applicable to physicians. The author, I have been told, was a Kansan by the name of James King. Here it is — "As time runs on, in sun and shade, may you bear with you ever in life's changing course, the sense of obligation and of wrong, and in your heart the rapture of a high resolve."

Now if I had the eloquence of a Winston Churchill or a Karl Mundt, I could develop quite an inspiring oration with those poetical words as a theme; or if I had the religious fervor of a Bishop Sheen or a Billy Graham perhaps even a sermon with that sentence as my text. However, freely confessing my limitations, let us analyze briefly the various phrases contained in this short sentence and see if we cannot find the answer to our question "How can the medical profession best serve the public?"

We all admit that time runs on — that conditions are always changing — that we have our periods of elation and our moments of despair, but then we come to the phrase "may you bear with you ever in life's changing course the sense of obligation——." The

physician has so many obligations - to his family - to his profession - to his patients - to his community, state and nation. Theodore Roosevelt once said that "every man owes part of his time and money to the profession in which he is engaged." So we can discharge this obligation to our profession to some extent by taking an active part in our District Medical Society, the State Medical Association and the American Medical Association. The physician who consistently fails to attend meetings, or who takes no active part in the affairs of his medical society, is hardly in a position to criticize the conduct of its affairs. By failing to make his voice heard, he must share the blame for any faults, failures or deficiencies. We also have an obligation to further the cause of medical education by contributing to such programs as the American Medical Education Foundation, our own University of South Dakota Medical School Endowment Fund, and other medical school alumni projects.

Then, too, we have an obligation to constantly keep in mind the welfare of the patient — to give the best medical care available. The fund of medical knowledge is now so vast that it is impossible for any one man to encompass it all. The present day medical care program must include the family physician, medical and surgical specialists, the diagnostic services of hospitals and other technical groups, the cooperation of departments of public health, the nursing profession, pharmacists and other ancillary services. It is only by the coordinated efforts of all these factors that we can hope to offer the best medical care available.

As citizens and physicians we have an obligation to take an active interest in the various voluntary agencies which are striving to improve the health of the people. At times I hear physicians gripe about and criticize the policies of such organizations as the Tuberculosis Association, Crippled Children Society, Heart Association, Mental Health Association, National Foundation for Infantile Paralysis, Red Cross, Health Councils, Public Health Departments, and so on. They complain that these organizations are run by laymen. Most of the officials of these agencies would welcome the active interest and counsel of members of the medical profession. How many of us realize and accept our responsibilities in these programs?

A good doctor is a good citizen. We have a definite obligation to take an active interest in civic affairs. The physician who fails to register and vote is not in a good position to complain about corruption, taxes or governmental policies which he finds obnoxious. By failing to fullfill one of the vital duties of citizenship, he must share the blame for any dark spots in the affairs of the community, the state or the nation.

And now that phrase "the sense of wrong." This immediately calls to mind the subject of ethics. Professional ethics embraces not only rules of conduct, but also moral principles which are left to the conscience of the individual. Ethics endeavor to express the Golden Rule and to delineate the practice and behavior which shall be acceptable between the physician and his colleagues on the one hand, and between the practitioner and his patients on the other. If we keep in mind "the sense of wrong" we will not have mercenary motives or selfish individualism. Nor would we suffer from the evils of professional jealousies and unwarranted criticism of one physician by another. For such actions harm all doctors in the eyes of the public.

And finally, "the rapture of a high resolve." Nowadays, perhaps too much emphasis is placed on the technique and business of medical practice, and not enough on the spirit of medicine. The profession of medicine is a humanitarian calling. Medical ethics are based on consideration for others. While scientific methods have brought brilliant achievements resulting from the search for the right things in the right way, it is faith in ideals and human relationships that bring happiness. That faith and inspiration will give us "the rapture of a high resolve."

By always striving to accomplish our "prime purpose of serving the common good and improving the health of mankind" the medical profession can best serve the public. And so I repeat "As time runs on, in sun and shade, may you bear with you, ever in life's changing course, the sense of obligation and of wrong, and in your heart the rapture of a high resolve." Thank you.



DISABILITY PLAN REOPENED

Ever since it was approved in September of 1948 — there has been available to our membership a very excellent plan of Group Disability Insurance underwritten by the Commercial Insurance Company of Newark, N. J. one of the "Loyalty Group" of Companies — and administered thru their General Agency office of Harold Diers & Company. Many thousands of dollars in benefits have been paid to insured members and the reports received by this office have repeatedly mentioned the very fine quality of claim service rendered.

Since many new members have joined our ranks since this plan was installed, special arrangements have been made with the Company to offer a second OPEN ENROLLMENT PERIOD for a period of 90 days commencing September 15th. Brief details of this are given in the full page announcement found in this issue. During this period the Company will accept all eligible applicants below age 60, who are actively engaged in their profession -- WITHOUT EVIDENCE OF INSUR-ABILITY — and regardless of past medical history — provided the required minimum number of new enrollments are secured during this 90 day period This liberal offer will permit many to secure coverage who have not been able to get insurance individually.

Complete details will be mailed to each member. May we suggest that you carefully study this and if you wish to take advantage of this Special Group Plan kindly mail your enrollment to the Company's agency office.

Benefits up to \$75.00 a week and \$15 a day hospital are available under this special offer—but coverage up to \$100 a week is available subject to the approval by the Company of your individual application.

A Companion plan of Hospital and surgical benefits for the Family is also available providing up to \$15 a day hospital benefit and up to \$300 Surgical Expense plus Miscellaneous Expense and IN-Hospital Medical care of \$3 a day extra. This plan carries the same Special Renewal Agreement found in your own policy.

THIS MONTH IN WASHINGTON

During the next three years the federal government expects to help finance the construction of thousands of new medical and dental facilities—diagnostic-treatment clinics, vocational rehabilitation centers, nursing homes, and chronic disease hospitals. Only three strings are attached: the facilities must be non-profit, they must be under medical or dental supervision, and local communities must raise part of the cost.

Legislation establishing the new program was enacted just as Congress plunged into its adjournment rush, and before it had come to final decisions on reinsurance and other major controversial bills in the health field.

The new operation was authorized by amending the Hill-Burton Act (passed in 1946 to assist hospitals) to permit grants to units that do not qualify as hospitals. Under the original Hill-Burton law, grants could be made to rehabilitation centers and diagnostic-treatment clinics only if they were attached to hospitals. Grants could also be made to chronic hospitals. The new law authorizes help to centers and clinics operating on their own, a provision Public Health Service expects to be particular assistance to smaller communities. It also offers aid to nursing homes, which previously were not covered.

In the case of chronic disease hospitals, it is explained that the law offers two new inducements for construction: 1. Money is al-

located to the state and earmarked for this particular type of hospital. 2. The federal government will be able to pay 50% or more in all cases, whereas under the old law the U. S. share was as low as one-third in some of the higher-income states.

Grants to clinics, centers, and nursing homes will have to wait on state surveys to determine priorities, according to U. S. hospital officials. However, if local sponsors take the initiative, grants can be processed immediately for chronic disease hospitals, as earlier Hill-Burton surveys have established their priorities. Failure of communities to construct chronic disease hospitals was one of the disappointments of the first Hill-Burton program.

The first year's appropriation will be \$37.4 million, increasing over the next three years until the total authorization of 0182 million has been reached. The new projects in no way interfere with the regular Hill-Burton grants for construction of hospitals, for which \$75 million is available this year.

The final flurry over the reinsurance bill was preceded by a concerted drive by the administration. The President himself interceded with insurance company officials, and Secretary Hobby agreed to amendments in an effort to satisfy the state insurance commissioners. The commissioners, who would have an important role in administering the reinsurance program, at first had flatly opposed it. President Walter B. Martin and other

A.M.A. officials were called in for a discussion of reinsurance at the Department of Health, Education, and Welfare, and later Sherman Adams, assistant to the President, also invited Dr. Martin to a White House meeting on the same subject.

As expected, bills for a new program of medical care of military dependents were left stranded when adjournment time approached. Before he introduced his bill on the subject, Chairman Dewey Short of the House Armed Services Committee insisted that Defense Department estimate first year's additional cost of the program. The estimate was \$67 million.

The military scholarships bill met the same fate — too much time taken up in drafting a version that would satisfy all executive departments. Under this plan the Defense Department would grant tuition-and-maintenance scholarships to medical and dental students, in exchange for pledges to spend one year in military service for every subsidized year of training. Both bills are certain to reappear next session.

For the current fiscal year, the Department of Health, Education, and Welfare has available \$1,663,413,761. The appropriation bill is \$10,904,500 more than the administration requested but under last year's budget of \$1,927,432,261 (the decline explained by decreased public assistance grants to states). Public Health Service has \$228,060,000 for its regular programs.

MEDICAL BOOKSHELF

INJURIES FROM ATOMIC BLASTS

The problem of caring for the injured and dead if an atomic attack should happen, is one of such magnitude that long range planning involving local and state defense authorities is necessary for preparedness measures. Dr. Thad P. Sears had this in mind when he wrote a very timely book entitled:

The Physician in Atomic Defense. Thad P. Sears. Yearbook, 1953.

From the foreword "This book is the result of a deep-seated conviction on the part of Dr. Sears that the community in which he lived should be prepared for atomic warfare. To this basic information he has added a dogged determination to arouse civilians and his professional col-

leagues from their unrealistic complacency." To this end there is a section devoted to the organization of the medical department for atomic defense including special function of evacuation and treatment of the injured. Other sections give information about clinical, biologic, pathologic and therapeutic aspects of atomic warfare.

A review describing the manifold reaction of the human body to ionizing radiations is:

Practical aspects of radiation injury by Louis H. Hempelman (In Annual Review of Nuclear Science v. 3, 1953, p. 369)

A brief appraisal is made of the possible lines of therapeutic alleviation suggested by current animal experimentation.

A summary is given of the data provided from the study of the Japanese exposed to nuclear explosions at Hiroshima and Nagasaki and a comparison made with the clinical syndrome of two accidents at the Los Alamos Scientific Laboratory.

In an article entitled Treatment of atomic and H-bomb burns published in **The Bulletin** of the Biological Sciences Foundation the following statement is made:

"Important medical discoveries are often made in an effort to meet the emergencies created by, and incident to wars, and to save lives or reduce sufferings brought about through epidemics or other catastrophes. Mankind, throughout the world will welcome and benefit by the recently published reports from physicians and other researchers at the Los Alamous Scientific Laboratory, of an ointment that successfully treats the skin and tissue damage caused by atomic bomb explosions and for the treatment of radiodermatitis caused by exposure of beta irradiation. Through carefully controlled research it has now been definitely established that an ointment made principally from one of the oldest known medical remedies, Aloe vera is the most satisfactory and successful remedy for the treatment of devastating skin and tissue damage caused by atomic bomb explosions and in the treatment of burns resulting from exposure to beta irradiation."

"Experimental acute radiodermatitis following beta irradiation. V. Histopathological study of the mode of action of therapy with Aloe Vera" by Lushbaugh, C. C. and Hale, D. B. Cancer 6:690, 1953.

Manual for Mobile Medical Team Personnel.

Compiled and edited by Warren South-

worth. University of Wisconsin, 1953.

The State Medical Society with the State Director of Civil Defense and his co-workers for Health Services prepared this manual as a handbook for the mobile medical team composed of the captain (a physician)his deputy (a physician, two dentists, two nurses, a business manager, two medical corpsmen, eight first aiders, four radiological monitors, four stretcher bearers, one carpenter, a mechanic, and two clerks to keep records. Includes organization suggestions, as well as suggestions for emergency treatment of disaster casualties. A good list of film and film-

strips are listed which can be rented for a minimum charge. Two, Survival under atomic attack and Tale of Two Cities are available free of charge from the Wisconsin Board of Health. State Office Building, Madison 2, Wisconsin.

For anyone interested in directing preparation for catastrophic situations or for instructing a course in civilian defense the following reference will be of interest:

"Medical aspects of the atomic explosion" by W. K. Riland. The Journal of the American Osteopathic Association. 53 #3: 163. Nov. 1953.

A series of 3 articles are published in this and in the two successive numbers. The general principles of atomic explosion are outlined. Lectures are included on Anatomy, physiology, burns, fractures, radiation sickness, intravenous saline injection, traumatic injuries and other phases.

Esther Howard Medical Librarian U. of S. D. Medical Library

PHYSICIANS OFFICE SUITE

In Sioux Falls

Waiting Room, Lab,
2 Examining Rooms and Office

Available About Jan. 1st

Contact

CHAS, VAN DE WALLE

Van De Walle Pharmacy

01

HARRY LEE

NATIONAL RESERVE LIFE INSURANCE CO.

for 90 days only

beginning Sept. 15th

An Unusual Opportunity ...

for all eligible members of the South Dakota State

MEDICAL and PHARMACEUTICAL ASSOCIATIONS

A SPECIAL OPEN ENROLLMENT PERIOD

for your STATE ASSOCIATION APPROVED PLAN OF

GROUP DISABILITY INSURANCE

URING this Special Enrollment Period all eligible members below age 60 who are actively engaged in your profession may enroll WITHOUT EVIDENCE OF INSURABILITY — and REGARDLESS OF PAST MEDICAL HISTORY — provided the required number of new enrollments are secured during this special 90 day period.

YOU ENJOY THESE SPECIAL ADVANTAGES UNDER YOUR ASS'N APPROVED PLAN

EVERY KNOWN DISABILITY COVERED — That wholly prevents you from carrying on your regular professional duties;

BENEFITS PAID UP TO 5 YEARS ON EACH DISABILITY for sickness or accident with no limit to the number of claims between now and age 70;

NO FUTURE INCREASE IN COST or CUT IN BENEFITS prior to age 70

30% to 40% SAVINGS IN COST — as compared to any other comparable policy;

YOUR INDIVIDUAL POLICY CANNOT BE CANCELLED OR RIDERED due to change of health or repeated claims, as long as you maintain your eligibility and your entire group remains insured in keeping with the Special Renewal Agreement that is a part of each policy.

Maximum Benefits up to \$100 a week are available subject to Company approval. But during this period members below age 60 may apply for these following WITHOUT EVIDENCE OF INSURABILITY as stated above.

\$325.00 a Month — \$75.00 a Week for Loss of Time \$15.00 a Day Hospital Benefit \$225.00 Maximum Surgical Benefit \$750.00 Maximum Blanket Medical Accident Expense \$1,000.00 Accidental Death or Dismembrament Your Semi Annual Premium on the above — \$88.00

Mail the following coupon for COMPLETE INFORMATION
about Your State Association Approved Plan for Yourself
and also for the FAMILY HOSPITAL PLAN for your Family

Mail	(HAROLD DIERS & CO General Agents 240 Keeline Building — Omaha, Nebraska			
this) NIANE	Please send complete information to	Age		
Now	(ADDRESS	7.30		

H. I. KING, M.D. 1881-1954

Dr. H. I. King, 72, of 915 S. Washington St., Aberdeen, died at 3 a.m. Thursday. June 24, at his residence.

Dr. King was born Nov. 11, 1881 at Spring Green, Wis. In June of 1909 he married Jessie Parden at New Richmond, Wis. He was a member of Sacred Heart Church, Knights of Columbus, Elks and Eagles.

He graduated from Northwestern University Medical School in 1905. He interned at Alexian Brothers Hospital in Chicago and did post-graduate work in surgery at the University of Vienna, Austria, in 1914.

After coming to the Hub City in 1907, he practiced medicine here until retiring in September 1951. During these years he was on the staff of St. Luke's Hospital.

In 1936 Dr. King received one of the highest honors given a layman by the Catholic Church when he was the recipient of the papal designation of Knight of St. Gregory.

He was active in his field, being a member of the International College of Surgeons, American College of Surgeons, South Dakota Medical Ass'n. of which he was made an honorary member this year and Aberdeen District Medical Ass'n. He was also a fourth degree member of the Knights of Columbus and member of the American Hereford Assn.

In addition to his widow survivors include four sons, Sgt. John W., Omaha, Neb.; Thomas I., H. I. Jr. and Dr. Bernard F., all of Aberdeen; three daughters, Mrs. Frank (Mary) Meehan and Mrs. Ray (Helen) Engler, both of Aberdeen; Mrs. John (Jane) Schmitt of Rantoul, Ill.; one brother, S. P. of Dodgeville, Wis.; three sisters, Mrs. Jane George and Mrs. Emma Pollard, both of Spring Green, Wis., and Mrs. Mary Savage of Milwaukee and 21 grandchildren.

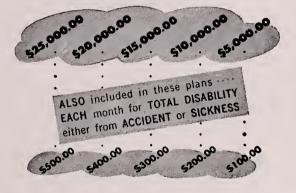


Something NEW is Cooking



MORE INSURANCE NOW AVAILABLE

WOULD HELP IN PAYING ESTATE TAXES IN CASE YOU ARE ACCIDENTALLY KILLED...



SPECIFIC BENEFITS ALSO FOR LOSS OF SIGHT.
LIMB OR LIMBS FROM ACCIDENTAL INJURY

HOSPITAL INSURANCE ALSO FOR OUR MEMBERS AND THEIR FAMILIES.

\$4,000,000 Assets \$20,000,000 Claims Paid 52 Years Old

Physicians Casualty & Health Ass'ns.
Omaha 2, Nebraska



This is your

MEDICAL ASSOCIATION

CHICAGO TO HOST MEDICAL WRITERS

Chicago has been selected as the 1954 site of the American Medical Writers Association meeting. Headquarters will be the Sherman Hotel and the sessions will be one day only, September 24th.

The program is headed by medical writers, educators, and publishing house representatives.

Dr. R. G. Mayer, editor of the S. D. Journal, and John C. Foster are S. D. members of the Association.

OCCUPATIONAL CONFERENCE WILL BE HELD

The 37th Annual Conference of the American Occupational Therapy Association will be held at the Shoreham Hotel, Washington, D. C., October 16-22, 1954. The meetings will be as follows: October 16-17

Preliminary Meetings
October 18-19
Institute — Interpersonal

Relations

October 20-21-22

General Conference —
Theme: "Capitalize Your
Assets"

CARDIOVASCULAR DISEASES COURSE TO BE GIVEN

A course in "Newer Developments in Cardiovascular Diseases" will be given at The Mount Sinai Hospital, New York, October 11th through 15th, 1954, under the auspices of the American College of Physicians. As the title implies, the recent advances will be stressed. Dr. Arthur M. Master and Dr. Charles K. Friedberg will direct the course and prominent cardiologists and cardiacsurgeons will participate.

NEWS NOTES

Dr. Mac Benjamin. for seven years a general practitioner in Flandreau has left to take a residency in psychiatry at Traverse City State Hospital in Michigan.

Dr. Roger M. Minkel. formerly of Fort Dodge, Iowa has been added to the staff of Homestake Hospital n Lead.

Dr. E. M. Stansbury, Vermillion, former State Medical Association Councillor has announced his retirement from active medical practice. Dr. Stansbury has completed 45 years of medical service.

Dr. Richard Lillard has become assocated with Dr. R. J. Quinn at Burke.

Dr. Rudolf Roesel, formerly associated with Dr. Quinn of Burke, has left for Chicago where he will take surgical training at Augustana Hospital.

Dr. Willis Stanage has joined the staff of the Yankton Clinic as pediatrician. Dr. Stanage was educated at U.S.D. and the U. of Nebraska.

Dr. I. L. Schuchardt has returned to Aberdeen where he practices in the Citizens Building. Dr. Schuchardt was located in Montana during recent months.

Dr. P. S. McIntyre, Bradley, has retired from the active practice of medicine and is now residing in Tuscon, Arizona.

Plans are being made to build a clinic in Highmore by the Hyde County Clinic Association. **Dr. Roman Bilak**, who is now interning at Sioux Valley Hospital in Sioux Falls will practice in the clinic.

Dr. J. S. Lydiatt, Lodge Pole, Nebraska, has joined the staff of the Hot Springs Clinic in Hot Springs.

Dr. J. P. McCann has associated himself in practice with Dr. W. G. Rieb at Parkston. Dr. McCann is a native

of Nebraska

Dr. Alvin Scheffel has established private practice in Redfield after having been associated with Drs. Scallin, Perry and Sanders for the past year.

The National Fund for Medical Education has presented a check for \$13,393.00 to the U. of S. D. Medical School.

MEDICAL SCHOOL NEWS NOTES

- 1. Two very fine lecture room tables have been donated to the medical school by Doctor and Mrs. W. G. Reib of Parkston.
- 2. Five medical students are spending their summer on special research projects at the medical school. Two of the students have received specially designated medical student research scholarships in support of their activities for the summer. Mr. Jack Titmarsh has received a medical scholarship from the National Foundation for Infantile Paralysis and is working on a special project with Doctor Willard Read, Assistant Professor of Physiology. Mr.

- Dean Guenther has received a research scholarship from the Lederle Pharmaceutical Company and is working on a project with Doctor Walter Hard. Professor of Anatomy. Medical students Charles Geppert and Charles Johnson are employed on a United States Public Health Research Grant working with Doctor John Fodden, Associate Professor of Pathology. Mr. Neil Trotman is employed for the summer in the Department of Microbiolgy assisting Doctor C. D. Cox, Professor of Microbiology.
- 3. Doctor Donald M. Mac-Canon has joined the medical faculty as Assistant Professor in Physiology, Doctor MacCanon recently received his Doctor of Philosophy Degree from the University of Iowa School of Medicine. He has made special studies in the field of intracardiac pressures under various physiological conditions utilizing the recently developed technics of intra-vascular cannulization. The South Dakota Heart Association recently donated \$1,500 in the support of the research project which Doctor MacCanon has initiated at the school.
- 4. All sophomore medical students were transferred to four year institutions for the completion of their training by mid-May with practically all students gaining acceptance to their first school of choice.
- 5. The University is initiating a new program in nurses training this fall. The program will be operated through the Arts and Science College, and will consist of a four-year degree program leading to the Bachelor of

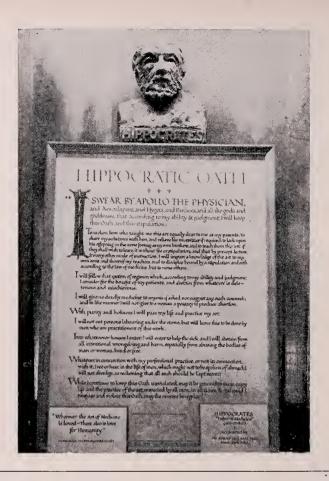
Science and an R.N. The medical school staff will, of course, service the several courses in the basic sciences represented in the curriculum. The first two years of didactic work will be spent on the University campus and the last two calendar years will be spent in the hospital. According to a news release, arrangements have been made with Bennett Memorial Hospital, Rapid City, to accommodate the last two years of the nursing training program.

6. A 25% increase in the freshman medical student enrollment will occur this fall. Expanded facilities in the new building will permit the registration of 40 medical students this year.

OB. & GYN. BOARD EXAMS

Applications for certification (American Board of Obstetrics and Gynecology) for the 1955 Part I Examinations are now being accepted. Candidates are urged to make such application sometime in July or August.

All candidates for admission to the Examinations are required to submit with their application, a plain type-written list of all patients admitted to the hospitals where they practice, for the year preceding their application or the year prior to their request for reopening of their application, with the diagnosis, pathological diagnosis, nature of treatment, and end result.



"Wherever the Art of Medicine is loved —There also is love for Humanity

The incarnation of this precept by Hippocrates is very fittingly exemplified through a display of medical art in the foyer of the new medical building at the University. The medical school is deeply indebted to Doctors Ronald and Mary Price, Armour, South Dakota, for their generosity in providing these historically significant memorablilia.

The walls of the central hall are adorned with ten sculptured plaques, each representing an outstanding medical figure of the age, dating from Imhotep (3,000 Medicine," through the time B.C.) "The Egyptian God of of Galen (138-201 A.D.), Pare (1510-90), and to the contemporary Sir William Osler (1849-1919). These beautiful sculpturings are the work of Doris Appel of Lynn, Massachusetts, whose husband, incidentally, is a practicing physician.

One of two special cabinet displays features a colored, hand-inscribed copy of the Hippocratic Oath prepared by calligrapher, James Hayes of Chicago. The beauty and artistic quality of this work does much to enhance the reverent philosophy embodied in the physician's code of ethics. An illuminated bust of Hippocrates adds additional dignity to the display of the Oath.

In the center of the entrance hall is a display of both the writings and illustrations of the dissections made by the eminent anatomist, Vesalius. The outstanding item is a rare copy of the famous "De Humani Corporis Fabrica," with the lustrations printed from the original wood-cuts dating back to about 1550. There are only some six hundred copies of this atlas in existence and their value is enhanced considerably when it is recognized the printings cannot be duplicated since the original wood-cuts were destroyed in the bombing of Munich, during World War TT.

It is to be recalled that Vesalius is recognized as the founder of the objective study of anatomy as we know it today. "De Fabrica" is a truly a valued document for both the artistry which is represented in the typography and the excellency of the dissections so faithfully recorded.

W. L. Hard, Dean School of Medical Science

Transactions of the South Dakota State Medical Association Seventy—Third Annual Session May 16, 17, 18, 1954

OFFICERS, 1954-55 President	COMMITTEE APPOINTMENTS STANDING COMMITTEES — 1954-55	
A. W. Spiry, M.DMobridge	Scientific Work	
President-Elect	A. W. Spiry, M.D., ChrMobridge	
F. D. Gillis, Sr., M.D. Mitchell	F. D. Gillis, Sr., M.D. Mitchell	
Vice-President	G. I. W. Cottam, M.D. Sioux Falls	
A. P. Peeke, M.D. Volga	Public Policy & Legislation	
Secretary-Treasurer	A. W. Spiry, M.D., Chr. Mobridge	
G. I. W. Cottam, M.D. Sioux Falls	F. D. Gillis, Sr., M.D. Mitchell	
AMA Delegate	G. I. W. Cottam, M.DSioux Falls	
A. A. Lampert, M.D. Rapid City	Publications	
Speaker of the House	R. G. Mayer, M.D., Chr. (1957)Aberdeen	
R. A. Buchanan, M.D. Huron	C. S. Roberts, Jr., M.D. (1955)Lake Preston	
Alternate Delegate A. P. Reding, M.D. Marion	D. H. Manning, M.D. (1956) Sioux Falls	
A. P. Reding, M.D. Marion	Medical Defense	
Chairman of the Council	M. W. Pangburn, M.D., Chr. (1955) Miller	
M. M. Morrissey, M.D. Pierre	V. V. Kobza, M.D. (1956)Rapid City	
COUNCILORS	D. R. Mabee, M.D. (1957)Mitchell	
First District (Aberdeen)	Medical School Affairs	
P. V. McCarthy, M.D. (1956)Aberdeen	Medical Education and Hospitals	
Second District (Watertown)	C. B. McVay, M.D., Chr. (1957)	
C. R. Stoltz, M.D. (1956)Watertown	H. Russell Brown, M.D. (1957)Watertown	
Third District (Madison)	F. R. Williams, M.D. (1955) Rapid City	
Magni Davidson, M.D. (1957)Brookings	Ronald Price, M.D. (1955)Armour	
Fourth District (Pierre)	W. H. Saxton, M.D. (1956)Huron	
M. M. Morrissey, M.D. (1956)———Pierre	L. J. Pankow, M.D. (1956) Sioux Falls	
Fifth District (Huron)	Medical Economics	
B. T. Lenz, M.D. (1957)	M. C. Tank, M.D., Chr. (1955) Brookings	
Sixth District (Mitchell)	R. H. Hayes, M.D. (1957)Winner	
B. R. Skogmo, M.D. (1957) Mitchell	P. R. Scallin, M.D. (1956) Redfield	
Seventh District (Sioux Falls)	Necrology	
C. J. McDonald, M.D. (1957) Sioux Falls	C. A. Clark, M.D. (1956) Lead	
Eighth District (Yankton)	J. B. Janis, M.D. (1957) Hoven	
A. P. Reding, M.D. (1956) Marion	G. H. Gulbrandson, M.D. (1955) Brookings	
Ninth District (Black Hills)	Public Health	
A. A. Lampert, M.D. (1955)Rapid City	G. J. VanHeuvelen, M.D., Chr. Pierre Subcommittee on Cancer	
Tenth District (Rosebud)	P. V. McCarthy, M.D., Chr. (1957) Aberdeen	
R. J. Quinn, M.D. (1955) Burke	W. A. Geib, M.D. (1955)Rapid City	
Eleventh District (Northwest) G. C. Torkildson, M.D. (1955)McLaughlin	Wm. Duncan, M.D., (1956)	
Twelfth District (Whetstone Valley)	Subcommittee on Tuberculosis	
F. F. Pfister, M.D. (1955)Webster	W. L. Meyer, M.D., Chr. Sanator	
1. 1. 1 1130C1, 111.D. (1000) WEDSTEL	Tr. D. Iticy ci, Iti.D., Cili	

J. M. Butler, M.D. (1955)	Hot Springs	Editorial	
J. P. Steele, M.D. (1956)		R. G. Mayer, M.D., Chr	Aberdeen
Subcommittee on Maternal & C		D. H. Manning, M.D.	
J. D. Bailey, M.D., Chr. (1955)	Rapid City	G. J. VanHeuvelen, M.D.	
W. E. VanDemark, M.D. (1957)		H. R. Wold, M.D.	
F. H. Cooley, M.D. (1956)		W. E. Jones, M.D.	
Executive Committee		Mary Price, M.D.	
A. W. Spiry, M.D., Chr.		Harold Lowe, M.D.	
F. D. Gillis, Sr., M.D		Amos Michael, M.D.	
G. I. W. Cottam, M.D.		T. W. Reul, M.D.	
A. P. Peeke, M.D.		1. *** 10001, 11112	W does to will
M. M. Morrissey, M.D.		Medical Licensure	
R. A. Buchanan, M.D.		F. F. Pfister, M.D., Chr.	Webster
Diabetes		Magni Davidson, M.D	
J. W. Donahoe, Chr. (1955)	Ciour Falla	C. E. Kemper, M.D.	
D. R. Nelimark, M.D. (1957)		Veterans Administration & Mil	
T. H. Sattler, M.D. (1956)		L. C. Askwig, M.D., Chr.	
, , , ,		D. H. Manning, M.D.	
Mediation Committe		F. F. Pfister, M.D.	
L. J. Pankow, M.D., Chr. (1957)		M. R. Gelber, M.D.	
T. F. Riggs, M.D. (1955)		· ·	
D. A. Gregory, M.D. (1959)		Spafford Memorial Fu	
D. S. Baughman, M.D. (1956)		T. E. Eyres, M.D.	
R. E. Jernstrom, M.D. (1958)	Rapid City	Prepayment & Insurance	
Mental Health		C. J. McDonald, M.D., Chr.	
Charles Yohe, M.D., Chr. (1957)		D. H. Breit, M.D.	
E. S. Watson, M.D. (1955)		E. A. Johnson, M.D.	Milbank
R. C. Knowles, M.D. (1956)	Sioux Falls	Roscoe Dean, M.DWessin	gton Springs
Benevolent Fund		A. A. Lampert, M.D.	Rapid City
Wm. Donahoe, M.D., Chr. (1955).	Sioux Falls	WY 15 1 Y - 1.1-11.	· .
J. C. Hagin, M.D. (1957)	Miller	National Legislation	
F. C. Totten, M.D. (1956)	Lemmon	A. W. Spiry, M.D., Chr	
Rheumatic Fever & Heart	Disease	F. D. Gillis, Sr., M.D.	
J. Argabrite, M.D., Chr. (1955)	Watertown	A. A. Lampert, M.D.	
D. C. Austin, M.D. (1956)	Brookings	A. P. Peeke, M.D	Volga
H. W. Farrell, M.D. (1957)	Sioux Falls	Rural Medical Servi	ce
SPECIAL COMMITTE	EES	A. P. Peeke, M.D., Chr.	Inquiish
Radio Broadcasts		G. J. Bloemendaal, M.D.	
J. P. Steele, M.D., Chr.	Yankton	E. F. Kalda, M.D.	Flatte
J. C. Rodine, M.D.	Aberdeen	Nursing Training	
Robert Olson, M.D.	Sioux Falls	W. H. Saxton, M.D., Chr.	Huron
J. H. Crawford, Jr., M.D.		E. C. Bobb, M.D.	
R. C. Jahraus, M.D.		H. J. Grau, M.D.	
F. D. Leigh, M.D		11. J. Glau, W.D.	rupia City
P. P. Brogdon, M.D.		Workmen's Compensa	tion
P. H. Koren, M.D		J. N. Hamm, M.D., Chr.	Sturgis
American Medical		H. R. Lewis, M.D.	
Education Foundation		R. Giebink, M.D.	
A. A. Lampert, M.D., Chr.			
H. Russell Brown, M.D.		Liason With S.B.H	
F. F. Pfister, M.D.		W. A. Geib, M.D., Chr	Rapid City
O. J. Mabee, M.D.	Mitchell	N. E. Wessman, M.D.	Sioux Falls
A. P. Reding, M.D.	Marion	C. L. Vogele, M.D.	Aberdeen
7. 1. Itcumg, W.D	IVI AL LUII	O. 1. 1 08010, 172,40 1	

701		Banks	
	$\Delta \Delta \Delta$	H D M Lea	

R. L. Carefoot, M.D., Chr.	Huron
C. L. Behrens, M.D.	Rapid City
A. K. Myrabo, M.D	Sioux Falls

Rehabilitation Committee

M. M. Morrissey, M.D., Chr	Pierre
A. A. Lampert, M.D.	Rapid City
R. E. VanDemark, M.D.	Sioux Falls
H. Russell Brown, M.D.	Watertown
W. A. Dawley, M.D	Rapid City

Committee for 1956 Joint Annual Meeting

R.	G. Mayer, M.D., Chr.	Aberdeen
	Russell Brown, M.D.	
	D. Gillis, Sr., M.D.	

Press Radio Committee

R. E. Jernstrom, M.D.,	Chr	Rapid City
E. A. Rudolph, M.D		Aberdeen
Steve Brzica, M.D.		Sioux Falls

Care of the Indigent

H. Russell Brown, M.D., Chr	watertown
F. F. Pfister, M.D.	Webster
P. V. McCarthy, M.D.	Aberdeen
E. J. Perry, M.D.	Redfield
F. C. Totten, M.D.	
R. F. Hubner, M.D.	
	Huron

Committee to Study Coroners Law

W. A. Geib, M.D., Chr	Rapid City
M. M. Morrissey, M.D.	
R. H. Hayes, M.D	

COUNCIL MEETING

Marvin Hughitt Hotel, Huron, South Dakota May 15, 1954

Chairman Dr. Robert VanDemark called the meeting of the Council to order at 4:00 P. M. Dining Room No. 1. Those present were: Drs. Mayer, Spiry, Gillis, Cottam, Brown, VanDemark, McCarthy, Stoltz, Pfister, Morrissey, Buchanan, Skogmo, Davidson, Reding, Lampert, Quinn, Torkildson, Jernstrom, Peeke and Mr. Foster.

Dr. Spiry moved to dispense with the reading of

Dr. Spiry moved to dispense with the reading of the minutes of the last meeting since they had been published previously. Motion seconded by Dr. Peeke and carried.

It was moved by Dr. Davidson and seconded by Dr. Stoltz that inasmuch as the Report of Council to House of Delegates had been published in the Handbooks of delegates, which will be available at the meeting, that the reading be dispensed with.

Motion carried.

Chairman VanDemark called for old business. The Physiotherapist's Licensing Bill, having been The Physiotherapist's Licensing Bill, having been referred to the Association's attorney, was submitted for action of the Council. The title is, "An Act Defining and Regulating the Practice of Physical Therapy; providing for Examination and Registration of Physical Therapists; Providing for the Enforcement of the Provisions Thereof, and Prescribing Penalties for violation." It was moved by Dr. Pfister and seconded by Dr. Mayer that this bill be introduced to the legislature and passage urged. Motion carried.

A proposed joint State Medical Meeting with the state of North Dakota (beginning around June 3, 1956, at Aberdeen) was discussed. Dr. Mayer moved that the incoming president appoint an over-all joint planning committee to arrange with the North Dakota Association for such a meeting. Motion was

seconded by Dr. Peeke and carried.

The results of the Survey conducted by the Committee on Military and Veteran's Affairs of the South Dakota State Medical Association were read south Dakota State Medical Association were read and it was moved by Dr. Skogmo and seconded by Dr. Davidson that the Council go on record as endorsing the American Medical Association's Policy regarding Veterans Administration welfare care and refer it to the House of Delegates. Motion carried. It was moved by Dr. Brown and seconded by Dr. Davidson that the Council recommend to the House of Delegates that the Percent of Survey. the House of Delegates that the Report of Survey be published in the South Dakota Journal. Motion

carried. The following report of the Auditing and Appropriations Committee was read by Dr. Gillis, Chair-

man of the Committee:

"The Auditing and Appropriations Committee recommends the approval of the Audit for the fiscal year 1953-54 as prepared by the Certified Public Accountant.

"It is further recommended that the following budget be adopted for the fiscal year 1954-55:

INCOME

Dues\$	28.000.00
Annual Meeting	5,000.00
Miscellaneous	300.00
Transfer of Legislative Item to Fund	
realister of Legislative Item to Fund	1,000.00
G	1,000.00

\$34,300.00

EXPENSES

Secretary-Treasurer\$	150.00
Attorney & Audit	450.00
Dues and Subscriptions	1,500.00
Council and Officers	1,800.00
Benevolent Fund	400.00
Annual Meeting	4,000.00
Executive Secretary travel	2,500.00
Executive Secretary salary	9,000.00
Office Secretary salary	2,625.00
Office expense	2,500.00
Public Relations	1.800.00
Reserve	1,000.00
Legislative Expense	2,000.00
Miscellaneous	100.00
	100.00

\$29,825.00

It was moved by Dr. Gillis and seconded by Dr. Peeke that the report as prepared by the Auditing and Appropriations Committee be accepted. Motion carried.

With respect to the Medical Economics Committee recommendation that uniform insurance forms be set up, it was moved by Dr. Peeke and seconded by Dr. McCarthy that work be continued seconded by Dr. McCarthy that work be continued toward evolving uniform insurance forms. Motion carried.

Motion was made by Dr. Jernstrom that recommendation be made to the House of Delegates to go ahead with present Group Life Insurance Plan and if it can't be finished within two months that another plan be explored. Motion was seconded by Dr. Morrissey and carried.

After discussion of State College plan of rural affiliation for Nurses' Training, and their request that three associations, Hospital Association, Nursing Association and South Dakota State Medical Association participate, it was moved by Dr. Gillis and seconded by Dr. Davidson that \$125.00 be appropriated for the Rural Affiliation program.

Motion carried. There being no further old business, Dr. Van-Demark called for new business.

The Summary of Findings and Recommendations

of the Report on the care of the Senile of the State of South Dakota, prepared by Griffenhagen and associates, was considered. Eleven recommendations were adopted by the Council, for the action of the House of Delegates. The recommendations

are, as follows:

*"The Council and House of Delegates of the South Dakota State Medical Association feel that the problem of the care of the senile cannot be divorced from the over-all problem of the State's responsibility to the mentally ill.

The Association wishes to commend the State Legislature for conducting a study on the care of the senile, and wishes to make the following recommendations on the report prepared by Griffenhagen and Associates:

"I. According to the report 'Any solution to the problem of the senile could very properly, and with the prospects of better results include the category of cure in chronic diseases which, of course, are not limited by the age

"This statement is considered as a basic concept by the reporting body. We question, not the accuracy of the statement, but rather the

ideology of it.

"Before the medical profession could either accept or reject a program of state care for the chronically ill, it would be necessary to determine whether the State has a responsibility for medical care of heart disease, cancer, hypertension, arthritis, ulcers, arteriosclerosis, migraine, prostatitis, asthma, and the other myriads of chronic diseases. Our recommendations to legislative officials would be to confine the state program to the mentally ill and the tubercular. We recommend that consideration be given

to establishment of a mental health authority in South Dakota to function as an independent body within the framework of other

Griffenhagen recommendations.

We endorse the idea of consolidation of many activities of the department of health and welfare. We oppose a full consolidation of both departments. We feel that the field of health is of such importance that it should be built up as an individual agency rather than be consolidated with another agency of unlike purposes and activities. It is further recommended that Agriculture Department activities in the field of human sanitation and inspection be transferred to the State Department of Health to eliminate duplication in those departments.

We endorse the plan to set up geographical health districts and have gone on record previously in support of legislation providing District Health Units, but we urge that none ever be created without first securing the services of a qualified public health officer. We recommend in this regard that a realistic attitude on professional salaries be arrived

at to attract qualified personnel. We endorse the idea of regional senile or aged chronic facilities planned for use by the aged and built in proximity to the larger general hospitals. In this regard we would urge that maximum use of Hill-Burton funds be made, but differ from the report in that we recommend that private agencies be given first opportunity to build the facilities rather than using state funds.

We agree that efforts should be made to provide not only domiciliary care but opportunity for worthwhile living for residents of the South Dakota Soldiers' Home.

We endorse the recommendation to modernize the commitment laws to Yankton State Hospital and urge all interested agencies to take action towards this end.

We oppose the creation of a "medical center" at Yankton State Hospital, because (a) the plan outlined by Griffenhagen and associates does not constitute what is commonly known as a medical center, and (b) under present plans of management the reclassifi-cation of patients has separated the senile and will ultimately provide for acute phys-ically ill mental patients. It is felt that a definite differentiation must be made in this State between the mentally ill aged and the non-mentally ill aged. It must be emphasized that the only place where competent trained personnel are available for proper study and treatment of the mentallyill aged is at the State Hospital where ex-cellent and sufficient housing is now available. Problems of the aged and physically ill aged (to distinguish from the mentally ill aged) should be studied by welfare and social agencies, qualified to determine what part, if any, the State should play in their re-habilitation, housing and care.

We recommend further study of providing care for tubercular patients at Yankton State Hospital or elsewhere instead of at Sanator; that more consideration be given to the surgical treatment of tubercular cases and that facilities be provided for such sur-

gical treatment.
We urge the state legislature to consider rapid and great enlargement of the Redfield

institution.

"11. In caring for senile and chronically-ill aged in the proposed centers, we urge clarifica-tion of the part to be played by County, State, Federal and private sources. On page 49 of the report, indication is made of a willingness of the medical profession to pro-vide care at no charge to Old Age Assistance recipients, which is an error. The Medical Association has never acted on a request of Association has never acted on a request of this sort, and would act only if a concrete plan were outlined and presented for consideration.

"Other recommendations of Griffenhagen and associates have not been touched upon because they concern the 'medical center' idea which is not approved by this Association.

*The recommendations presented herein include amendments made later by the House of Delegates.

Regarding the recommendations to the Governor of an appointee to the Board of Medical Examiners, it was moved by Dr. Pfister and seconded by Dr. Gillis that the names of Drs. Davidson, Reding and Cottam be submitted to fill out that panel. Motion carried.

It was moved by Dr. Pfister and seconded by Dr. Davidson that the incoming President appoint the Advisory Board for Society of Crippled Children.

Motion carried.

It was moved by Dr. McCarthy and seconded by Dr. Pfister that approval be given to reopen group enrollment for Diers plan, about August 1 for 90 days. Motion carried.

It was moved by Dr. McCarthy and seconded by Dr. Davidson that Drs. Hans Jacoby, Huron; William Duncan, Webster and G. F. McIntosh, Eureka, be reappointed to the Cancer Board. Motion carried. It was moved by Dr. Brown and seconded by Dr. Buchanan that Dr. Lampert be named as a delegate to the Council on National Emergency Medical Service to be held in San Francisco June Medical Service, to be held in San Francisco June 20, Sunday. Motion carried.

No action was taken on the Grievance Committee

Report.

Regarding the National Guard Examination Fees, Dr. Skogmo moved that the Council go on record as objecting to that fee. Motion was lost for want of a second.

The last five items on the agenda are to be con-

sidered at the next meeting of the Council.

It was moved by Dr. Gillis and seconded by Dr. Cottam that Dr. Mayer's report to Dr. Farber, South Dakota Legislative Research Council, regarding health laboratories be approved. Motion carried.

Dr. Mayer read a letter asking that an advisory committee be appointed for the Rural Affiliation program of nurses. Dr. Peeke moved that the committee on nursing be assigned this duty, seconded by Dr. Pfister, carried.

Dr. VanDemark thanked all the members of the Council for their cooperation during the year.

Announcements were made concerning the House

of Delegates meeting.

There being no further business, the meeting adjourned at 6:50 P. M.

SECOND COUNCIL MEETING Marvin Hughitt Hotel, Huron May 17, 1954

The second meeting of the Council was called to order at 10:20 p.m. by R. G. Mayer, president of the Association as the chairman had not been elected.

Those present were Drs. Mayer, Spiry, Gillis, Cottam, Brown, McCarthy, Stoltz, Pfister, Morrissey, Buchanan, Skogmo, Davidson, Reding, Lampert, Quinn, Torkildson, Peeke, Lenz, McDonald, and executive secretary Foster.

Dr. Reding moved that Dr. M. M. Morrissey be nominated for the chairmanship of the Council. Dr. Reding moved that the secretary be instructed to cast a unanimous ballot for Dr. Morrissey. Motion seconded by Dr. McCarthy and carried.

Dr. Spiry moved that the reading of the minutes of the previous meeting be dispensed with. Motion seconded by Dr. McCarthy and carried.

The new chairman of the Council, Dr. Morrissey then called for old business. Dr. Peeke moved that the State Medical Association again endorse the AAPS Essay Contest and that prizes of \$50.00, \$25.00 and \$15.00 for first, second and third places again be awarded by the Association. Motion seconded by Dr. Gillis and carried.

After the reading of a resolution from the Colorado State Medical Association to the car manufacturers on motor car safety, Dr. Davidson moved that the South Dakota State Medical Association endorse the resolution of the Colorado Medical Society in principle. Motion seconded by Dr. McCarthy and carried. The resolution of the Colorado Medical Society follows:

Whereas; motor car deaths in the United States of America number between 35,000 and 40,000 annually and motor car injuries number about four million annually, and

Whereas, there seems little likelihood of any great reduction of motor accidents in the near future, and;

Whereas; studies by physicians and physicists have clearly shown that motor injuries and motor deaths can be strikingly reduced by the use of safety belts, safety shoulder straps, therefore be it

Resolved: That the Colorado State Medical Society will give all possible aid to those measures which will reduce the frightful mortality and injury rate resulting from the use of motor cars, and be it further

Resolved: That the Society hereby recommends to the motor car manufacturers of America that they equip all Automobiles with safety belts to meet the specifications of the C.A.A. Technical Standard Order, T.S.O.-C22A, November 15, 1950; and further recommends that these manufacturers provide seats, cushions, and doors which will withstand impacts of 10 to 15 G's without injuries.

Upon completion of the old business, Dr. Morrissey called for new business. Mr. Kraft, Boy Scout executive from the Pheasant Council talked before the group for a few minutes. Dr. Mayer moved that the Council recommend consideration by the six districts in the Pheasant Council for providing a health lodge for the Scout camp. Motion seconded by Dr. McCarthy and carried.

Dr. Gillis brought up a Retirement plan for Mr. Foster. Dr. Gillis moved that the chairman appoint a committee of three members to study the plan and report back to the Auditing and Appropriations Committee with some plan before the next meeting which would be a year from this meeting. Motion seconded by Dr. Spiry and carried. The committee appointed by Dr. Morrissey to study the plan were Drs. McCarthy, chr., Lampert, and Pfister.

A request from the German Consulate was read by Mr. Foster concerning the names of German speaking psysicians in South Dakota who might be willing to serve in examining German Nationals. The names of Drs. Pollerman and Jacoby were suggested for contacting.

Dr. McCarthy moved that Dr. Mayer again be named editor of the South Dakota Journal of Medicine and Pharmacy. Motion seconded by Dr. Peeke and carried.

After a discussion of re-designing the Association letterhead, it was moved by Dr. Spiry and seconded by Dr. Stoltz that the letterhead be redesigned but to keep the names of councillors and officers. Motion carried.

The meeting adjourned at 11:00 p.m.

HOUSE OF DELEGATES MEETING Dining Room No. 2, Marvin-Hughitt Hotel, Huron May 15, 1954

The 73rd Annual Session of the House of Delegates of the South Dakota State Medical Association was called to order at 7:30 P. M. by Dr. Peeke, Speaker of the House. Mr. Foster called the roll. The following members were present: Drs. Mayer, Spiry, Gillis, Sr., Cottam, Brown, Peeke, VanDemark, McCarthy, Stoltz, Davidson, Morrissey, Buchanan, Skogmo, Reding, Lampert, Pfister, Gelber, Austin, Wold, Askwig, Burman, Gillis, Jr., Delaney, Stevens, Ogborn, Jones, McDonald, Kohlmeyer, Livingston, Lyso, Grau, Hamm, Geib, Hayes, and executive secretary Foster.

It was moved by Dr. Spiry and seconded by Dr. McCarthy that the reports as published in the handbook not be read but be referred to the proper Reference Committees for consideration. Motion carried.

Dr. Peeke appointed the following committees:
1. Credentials Committee — Dr. Morrissey, Chr., and Drs. R. J. Delaney and Livingston.

Reference Committee on Officers and Councilors — Dr. Geib, Chr., and Drs. McCarthy and Kohlmeyer.

3. Reference Committee on Resolutions and Memorials — Dr. Buchanan, Chr., and Drs. Lyso and Grau.

4. Reference Committee on Reports of Standing Committees - Dr. Lampert, Chr., and Drs.

Stevens and Skogmo.

5. Reference Committee on Reports of Special Committees and Miscellaneous Business -

McDonald, Chr., and Drs. Wold and Reding.

6. Nominating Committee — Dr. Reding, Chr., and Drs. Gelber, Stoltz, Austin, Askwig, Burman, Gillis, Jr., Ogborn, Hamm, Hayes, Spiry and Pfister.

Peeke called for new business since the Council's report of the afternoon session was being prepared. Dr. Geib introduced a resolution regarding the present Coroner's system in South Dakota. This resolution was referred to the Reference Committee on Resolutions and Memorials. The resolution follows

"WHEREAS, The present Coroner's system in South Dakota is not functioning efficiently and

needs extensive modifications and revisions, and "WHEREAS, It is necessary in the interest of justice to all citizens to investigate by the best medical means available all deaths in which there is a suspicion of criminal involvement and all deaths which were either sudden or accidental, and

"WHEREAS, the Black Hills District Medical Society has officially gone on record as favoring the establishment of a Committee to study the Coroner's office in South Dakota,

"NOW THEREFORE, BE IT RESOLVED, That the House of Delegates of the South Dakota State Medical Association approve a Committee to study the present Coroner's Office and to present to the next South Dakota Legislature a bill embodying the necessary qualifications and revisions for the office of Corner."

Dr. McDonald introduced a resolution to change the by-laws on election of councillors as follows:

Be it resolved that the proper additions to the by-laws be made whereby each district is entitled to one councillor elected by the membership of each district for a term of three years.

The speaker appointed the following Committee on By-Laws to consider amendment to the present by-laws: Dr. Stoltz, Chr., and Drs. Gillis and

Skogmo.

Dr. McDonald introduced a resolution chiding Senator Karl Mundt's using his name in sponsorship of Chiropractor's Association. Dr. Peeke referred this to the Committee on Resolutions. In this connection Mr. Foster read a letter from Senator Mundt to Dr. Sercl, President, Seventh District Medical Society, Sioux Falls, S. D.

The following physicians were nominated for Honorary Membership in the State Association: Dr. W. E. Morse, Rapid City, proposed by Dr.

Hamm

Dr. G. A. Stevens, Sioux Falls, proposed by Dr. VanDemark

Dr. H. I. King, Aberdeen, proposed by Dr. Mc-

It was moved by Dr. Jernstrom and seconded by Dr. McCarthy that these nominations be accepted. Motion was carried.

Dr. Gelber brought before the House of Delegates the following: Simplifying insurance forms for accident insurance; who should appoint physician for care of County indigent or should patient have free choice of physician. After discussion, Dr. Mayer moved and Dr. Davidson seconded that a Special Committee of three be appointed to study the question of the care of the indigent in South Dakota and be instructed to report to the Council

at its September meeting. Motion carried.

Dr. Wold introduced a resolution regarding raising the standard of the Healing Arts in the State of South Dakota. This resolution was referred to the Reference Committee on Reports of Special Committees and Miscellaneous Business. The resolution follows:

"RESOLUTION REGARDING RAISING THE STANDARDS OF THE HEALING ARTS IN THE STATE OF SOUTH DAKOTA"

"WHEREAS, South Dakota State Medical Assowhereas, south barota state medical Asso-ciation is primarily interested in raising the standards of the healing practice in the State, "NOW THEREFORE, BE IT RESOLVED, That the South Dakota State Medical Association take

a positive stand regarding Legislation; that it not wait for cultists to introduce legislation which lowers the standards of practice; but that the Association introduce legislation which will raise the standards of practice of healing arts above the level of which cultists can qualify, and "BE IT FURTHER RESOLVED, That no prac-

titioner of healing arts be admitted to the staff of any hospital supported by public funds who has not completed an internship approved by the Joint

Committee, and "BE IF FURTHER RESOLVED, That no practitioner of the healing arts draw any compensation from public funds who has not completed a course of study, equivalent to the course of study of Class "A" Medical School."

The Council of the State Medical Association

made the following recommendations to the House of Delegates, which were referred to proper com-

mittees for action:

That a licensing law be approved as part of a positive program against cultists, which was submitted in the form of a bill, entitled, "An Act Defining and Regulating the Practice of Physical Therapy; providing for Examination and Registration of Physical Therapists; Providing for the Enforcement of the Provisions Thereof, and Prescribing Penalties for violations", the Council having urged its introduction and present (Pafrage) ing urged its introduction and passage. (Referred

to Comm. No. 2)
That inasmuch as the House of Delegates has already approved the matter of a proposed joint State Medical Meeting with the state of North Dakota, the Council announces preparations are being made for such a meeting in Aberdeen, and recommends that the incoming president appoint a planning committee for such arrangement.

That the State Medical Association go on record

as endorsing the American Medical Association policy regarding Veterans' Administration non service-connected care; this is referred to the House for final action; also recommended that the results of the survey conducted by the Council be published in the Journal and proper action be taken. (Referred to Comm. No. 2)

Recommends that the following budget be

adopted:

INCOME

Dues\$	28,000.00
Annual Meeting	5,000.00
Miscellaneous	300.00
Transfer of Legislative Item to Fund	1,000.00
-	

\$34,300.00

EVDENCEC

150.00
450.00
1,500.00
1,800.00
400.00
4,000.00
2,500.00
9,000.00
2,625.00
2,500.00
1,800.00
1,000.00

2,000.00 Legislative Expense 100.00 Miscellaneous

\$29,825.00

(Referred to Comm. No. 2) Recommends the work which has been started on uniform insurance forms be continued and carried toward evolving uniform insurance forms.

Recommends that every effort be made to complete Group Life Insurance Plan and, if it can't be completed within two months, that another plan

be explored. (Referred to Comm. No. 2)

That eleven recommendations of Council regarding Griffenhagen Report, care of seniles in South Dakota, be adopted. (Referred to Comm. No.

There being no further business, the Speaker

adjourned the meeting, on motion.

HOUSE OF DELEGATES MEETING Dining Room No. 2, Marvin-Hughitt Hotel, Huron May 16, 1954

The second session of the House of Delegates was called to order by Dr. Peeke at 2:00 P. M. Mr. Foster called the roll and the following members were present: Drs. Peeke, Mayer, Jernstrom, Spiry, Gillis, Sr., Cottam, Brown, VanDemark, McCarthy, Gillis, Sr., Cottam, Brown, VanDemark, McCartny, Stoltz, Davidson, Morrissey, Buchanan, Skogmo, Reding, Lampert, Quinn, Torkildson, Gelber, Cooley, King, Vogele, Willen, Argabrite, Austin, Wold, Askwig, Riggs, Gryte, Gillis, Jr., Pollerman, Stevens, Ogborn, Jones, McDonald, Kohlmeyer, Pankow, Anderson, Billion, Myrabo, Livingston, Lyso, Steele, Sattler, Grau, Hamm, Geib, Clark, Kegaries, Davidson & Hayes.

The minutes of the previous meeting were read:

The minutes of the previous meeting were read; Dr. Stoltz moved to amend the minutes to include the following proposals by the Committee on Amendments to the By-Laws, which Committee was appointed by the Speaker at the first session:

"Chapter 7, Section 1—Strike out 'Grievance Committee' and replace it with 'Mediation Com-

mittee'

"Chapter 7, Section 14—Strike out 'Grievance Committee' and insert in its place 'Mediation Committee'

"Chapter 1—Change Section 9 to Section 10.

Add Section 9, as follows: 'At some meeting in advance of the Annual Session of this Association each component district society shall select a list of three (3) members to be submitted to the Nominating Committee of the House of Delegates of this Association as its recommendations for the office of councillor from that district society. This shall be done in years when a councilor is to be elected from that district society. The secretary of the component district society shall submit these three (3) names to the secretary-treasurer of this Association at least thirty (30)

days before the Annual Session.'

"Chapter 4—Change Section 2 to Section 3 and Section 3 to Section 4. Add Section 2, as follows: 'Whenever a councilor's term expires, the Nominating Committee of the Section 3. inating Committee shall select at least one (1) nominee for the office of councillor from each district from the list of three (3) submitted by each component district society."

Motion was seconded by Dr. McCarthy and carried. It was moved by Dr. Buchanar and seconded by

It was moved by Dr. Buchanan and seconded by Dr. Reding that the minutes as read, and as amended, be approved. Motion carried.

"The report of the Nominating Committee was read by the Chairman, Dr. Reding, who moved its

adoption; the report follows:
"The Nominating Committee presents in nomination the following slate for positions as officers of the Association:

President-Elect—Floyd Daniels Gillis, Sr., M.D.

Mitchell

Vice-President-A. P. Peeke, M.D., Volga Speaker of the House-R. A. Buchanan, M.D., Huron

Delegate to the AMA-H. Russell Brown, M.D., Watertown

Alternate delegate to AMA-A. A. Lampert, M.D., Rapid City Councillor, Third District—Magni Davidson,

M.D., Brookings Councillor, Fifth District—B. T. Lenz, M.D., Huron

Councillor, Sixth District-B. R. Skogmo, M.D., Mitchell

Councillor, Seventh District--C. J. McDonald, M.D., Sioux Falls

"The Nominating Committee recommends Mitchell as the place for the 1955 meeting, the dates to be left to the Executive Committee and the Executive Secretary."

In response to the Speaker's request for nominations from the floor, Dr. Brown withdrew his name as delegate to the AMA and moved the substitute nomination from the floor for Dr. Lampert for a two-year term. Motion was seconded by Dr. Mc-Carthy and carried. Nomination was opened for Alternate Delegate to AMA for a two-year term. Discussion followed. Dr. Spiry moved, and Dr. Buchanan seconded, to nominate Dr. Reding as alternate delegate. No further nominations were made. Dr. Geib moved and Dr. Ogborn seconded that motion be tabled. Motion lost by a show of hands. It was moved by Dr. Wold and seconded by Dr. Jernstrom that nominations cease. Motion carried. Dr. Gelber moved and Dr. Wold seconded that the report of the Nominating Committee, with the amendments just passed, be accepted. Motion carried.

Dr. Mayer read the following letter, dated April 14, from Charles Geppert, Pres., SD Chapter, SAMA, and Alan E. Shumacher, Delegate, SD

Chapter, SAMA:
"On behalf of the South Dakota Chapter of the Student American Medical Association, would like to express our appreciation for the support tendered to our chapter in helping to make possible our representation at the coming Student American Medical Association Conven-

"Please express our thanks to the member-ship of the South Dakota State Medical Associa-

tion.

Dr. Mayer also read a portion of a letter, from Alan E. Schumacher (noting 100% membership in the Student AMA); this letter will be published in the South Dakota Journal.

The report of the Reference Committee on Credentials was read. It was moved by the Chairman, Dr. Morrissey, and seconded by Dr. Jernstrom, that the report be adopted. Carried. Report of the

Credentials Committee follows:
"Preliminary Report 5-16-54
"49 Medical Association Members Final Report 197

"21 Exhibitors
"3 Speakers 53 75 "All credentials in order."

The Report of the Reference Committee on Officers and Councillors was read. Discussion followed on Item XIII of the report to the Legislative research council. It was moved by Dr. Stoltz and seconded by Dr. Jones that the following addition be made to Recommendation No. 9 (Griffenhagen recommendations), as amended by the Reference Committee: "at Sanator or elsewhere." Motion carried.

Discussion followed on Item XV. Since it was brought out to be the intent of the Reference Committee to endorse the action of the Council, it was moved by Dr. Wold and seconded by Dr. McCarthy that the report of Reference Committee be amended

and changed to read:
"The Recommendation that the Group Life Insurance Plan make continued efforts for the next two months to obtain new members, and that the present plan be dropped at the end of two months, and another plan be explored, was discussed and approved."

It was moved by the chairman, Dr. Geib, and seconded by Dr. Davidson that the report of the Reference Committee on Officers and Councillors, with the amendments just passed, be adopted.

Motion carried.

The Report of the Reference Committee on Resolutions and Memorials was read. It was moved by the chairman, Dr. Buchanan, and seconded by Dr. Davidson, that the report be adopted. Motion

carried.

The Speaker of the House called for the Report of the Reference Committee on Standing Commit-tees. Dr. Lampert stated Dr. Skogmo had been released for functions on Reference Committee

No. 7, Committee on Amendments to the By-Laws.
It was moved by Dr. Lampert and seconded by Dr. Wold that the Report of the Committee on Scientific Work be adopted. Motion carried.
It was moved by Dr. Lampert and seconded by Dr. Buchanan that the Report of the Committee on Dr. Bucha Public Policy and Legislation be adopted. Motion

It was moved by Dr. Lampert and seconded by Dr. Gillis, Jr., that the Report of the Committee on

Publications be adopted. Motion carried.
It was moved by Dr. Lampert and seconded by Dr. Morrissey that the Report of the Committee on Medical Defense be adopted with recommendations of the Reference Committee. Motion carried.

It was moved by Dr. Lampert and seconded by Dr. Buchanan that the Report of the Committee on Medical School Affairs, Medical Education & Hospitals be adopted. Motion carried.

It was moved by Dr. Lampert and seconded by Dr. McCarthy that the Report of the Committee on Medical Economics be adopted. Motion carried.

It was moved by Dr. Lampert and seconded by Dr. Wold that the Report of the Committee on Necrology be adopted. Motion carried.

It was moved by Dr. Lampert and seconded by Dr. McCarthy that the Report of the Committee on Public Health be adopted. Motion carried.

Public Health be adopted. Motion carried.

It was moved by Dr. Lampert and seconded by Dr. Wold that the Reports of the Subcommittees on Cancer, Tuberculosis and Maternal & Child

Welfare be adopted. Motion carried.

It was moved by Dr. Lampert and seconded by Dr. Gillis, Jr., that the Report of the Committee on Diabetes be adopted. Motion carried.

It was moved by Dr. Lampert and seconded by Dr. Wold that the Report of the Executive Committee be adopted. Motion carried.

It was moved by Dr. Lampert and seconded by Dr. Gelber that the Report of the Grievance Committee be adopted. Motion carried.

It was moved by Dr. Lampert and seconded by Dr. Ogborn that the Report of the Committee on Mental Health be adopted. Motion carried.

Discussion followed on Item XVI, Report of the Committee on the Benevolent Fund. It was moved by Dr. Brown and seconded by Dr. Kohlmeyer that the second paragraph of the Report of the Committee on the Benevolent Fund be stricken from Lampert and seconded by Dr. Askwig that the Report be adopted, with the amendment just passed. Motion carried.

It was moved by Dr. Lampert and seconded by Dr. Stoltz that the Report of the Committee on Rheumatic Fever & Heart Disease be adopted.

Motion carried.

It was moved by Dr. Lampert and seconded by Dr. McDonald that the Report of the Reference

Committee on Reports of Standing Committees as a whole, as amended, be adopted. Motion carried.

The Report of the Reference Committee on Special Committees and Miscellaneous Business was called. It was moved by Dr. McDonald and seconded by Dr. Stoltz that the Report of the Committee on Radio Broadcasts be adopted. Motion carried.

It was moved by Dr. McDonald and seconded by Dr. Austin that the Report of Committee on American Medical Education Foundation be adopted.

Motion carried.

It was moved by Dr. McDonald and seconded by

Dr. Stoltz that the Report of the Editorial Committee be adopted. Motion carried.

It was moved by Dr. McDonald and seconded by Dr. VanDemark that the Report of the Committee on Medical Licensure, as amended by the Reference

Committee, be adopted. Motion carried.

It was moved by Dr. McDonald and seconded by Dr. Davidson that the Report of the Committee on Veterans Administration & Military Affairs be adopted. Motion carried.

It was moved by Dr. McDonald and seconded by Dr. Kohlmeyer that the Report of Committee on Spafford Memorial Fund be adopted. Motion carried.

It was moved by Dr. McDonald and seconded by Dr. Kohlmeyer that the Report of Committee on Prepayment & Insurance Plans be adopted. Motion carried.

It was moved by Dr. McDonald and seconded by

Dr. Buchanan that the Report of Committee on National Legislation be adopted. Motion carried. It was moved by Dr. McDonald and seconded by Dr. Davidson that the Report of the Committee on Rural Medical Service be adopted. Motion carried. It was moved by Dr. McDonald and seconded by

Dr. VanDemark that the Report of Committee on Nursing Training, as amended by the Reference Committee, be adopted. Motion carried. It was moved by Dr. McDonald and seconded by

Dr. Buchanan that the Report of Committee on Workmen's Compensation be adopted.

carried.

It was moved by Dr. McDonald and seconded by Dr. Jernstrom that the Report of Liaison Committee with S.B.H. be adopted. Motion carried.

It was moved by Dr. McDonald and seconded by Dr. Davidson that the Report of the Committee on Interprofessional Relations be adopted. Motion carried.

It was moved by Dr. McDonald and seconded by Dr. Stoltz that the Report of the Committee on the Study of Improvement of Patient Care be adopted. Motion carried.

The Committee on Blood Banks did not make a

report.

Discussion followed on Item XVI, Resolution regarding Raising the Standards of the Healing Arts in the State of South Dakota. It was moved by Dr. McDonald to adopt the Resolution as amended by the Reference Committee, i.e. by striking out the lost programs. ing out the last paragraph. Motion lost by un-animous consent. It was moved by Dr. Brown and seconded by Dr. Mayer that the Reference Committee Report be amended as approving the intent of the Resolution in principle but disapproving it as a specific resolution and that Reference Committee urge that counsel of the State Medical Association do consider the introduction of constructive legislation to elevate the practice of the Heal-

ing Arts in the State. Motion carried.

It was moved by Dr. McDonald and seconded by Dr. Morrissey that the Report of the Reference Committee on Special Committees and Miscelland Miscelland Residue (1988).

laneous Business, as a whole, as amended by the House, be adopted. Motion carried.

The Speaker of the House then called for the Report of the newly-appointed Reference Committee on Amendments to the Constitution and ByLaws. It was moved by Dr. Stoltz, the chairman, and seconded by Dr. Ogborn that the Report, as a whole, with specific By-Laws changes, be adopted.

Motion carried.

Mr. Foster made announcements regarding the program for the day and the following two days of the convention. Mr. Foster also stated the first Council meeting of the new year is scheduled to be held after the Banquet Monday night, at which time the new councillors will be seated and a new Chairman, and other officers, will be elected.

Chairman, and other officers, will be elected.
Dr. Livingston nominated Dr. J. C. Ohlmacher,
Aberdeen, for the Distinguished Service Award.
It was moved by Dr. Mayer and seconded by Dr.
Askwig that nominations close. The motion was

carried.

Dr. Buchanan moved, Dr. Jernstrom seconded, that the meeting adjourn. Motion carried and the meeting adjourned at 4:00 P. M.

PRESIDENTIAL OATH OF OFFICE

I solemnly swear that I shall carry out the duties of the President of the South Dakota State Medical Association to the best of my ability. I shall strive constantly to maintain the ethics of the medical profession and to promote the public health and welfare. I shall dedicate myself and my office to improving health standards and to the task of bringing increasingly improved medical care to the people of South Dakota. I shall uphold the Constitution of the United States and the Constitution and by laws of the A.M.A. and the South Dakota State Medical Association. I shall champion the cause of freedom in medical practice and freedom for all my fellow Americans.

I do solemnly swear that I will discharge the duties of this office to the best of my ability, so help me God.

REPORT OF OFFICERS AND COUNCILLORS AS ADOPTED BY THE HOUSE OF DELEGATES

REPORT OF THE PRESIDENT

To the Officers, Council, House of Delegates and Members of the South Dakota State Medical Association:

The past year has been an active and most interesting year for your President. I had hoped to visit every district medical society in the state sometime during my term of office, but conflicts in meeting dates prevented my visiting the Huron and Rosebud Districts. However, I did make an official visit to the other ten district societies.

For several years suggestions for realignment of districts have been advocated. My visits have convinced me that some of our districts do not have enough members for them to function efficiently as component medical societies, I, therefore, recommend that the House of Delegates authorize a special committee of three to study this matter thoroughly and present a concrete proposal to the Council at the September meeting.

I attended all of the meetings of the Council and the district medical society officers' meeting with the Council. As ex-officio member, I sat in on meetings of the Medical Economics Committee, Medical School Affairs Committee (2), Liason Committee with the State Board of Health, and the American Medical Education Foundation Committee.

With other officers of the State Medical Association, I met with officers of the American Legion, and Liason Committees were established for future meetings to discuss mutual problems in the care of Veterans. I also conferred several times with members of the North Dakota State Medical Association and their Executive Secretary regarding the contemplated joint session of the North Dakota and South Dakota State Medical Associations in 1956, the seventy-fifth Anniversary of organized medicine in the Dakotas.

I attended the North Central Conference at St. Paul last fall and was on the program for a talk on "Professional Liability Insurance." South Dakota was well represented at this annual conference on medical economics. being especially honored by having H. Russell Brown, M.D. serve as its President and E. F. Kalda, M.D. of Platte, who spoke on "Relations with Osteopaths." Other South Dakotans present were A. W. Spiry, President-Elect; F. D. Gillis, Sr., Vice-President; A. P. Peeke, Speaker of the House of Delegates; D. A. Gregory, Past President; Councilors. A. A. Lampert, Magni Davidson; Dean of the Medical School, Walter L. Hard; and executive secretary Foster.

I attended the annual meetings of the South Dakota Chapters of the American College of Surgeons and the General Practitioners, both meetings being held at Huron. At Springfield, Illinois, I attended the annual meetings of the American Medical Writers' Association and the Mississippi Valley Medical Association.

In June, I attended the Health Education Workshop at Northern State Teachers College and gave a talk on "Health Appraisal in Schools." From September 30 to October 2, Mr. Foster and I attended the biennial conference on Physicians and Schools at Highland Park, Illinois. In February I made a tape recording of a talk appealing for funds for the South Dakota Heart Association which was broadcast over station KSDN.

On February 28 I attended the AMA Regional Conference on Care of Veterans at Omaha, Nebraska. South Dakota was also represented at this conference by A. W. Spiry, President-Elect; Councillors A. A. Lampert; B. R. Skogmo, and L. C. Askwig and Don H. Manning members of our Committee on Veterans' Administration and Military Affairs; and executive secretary, John C. Foster.

On November 20 I was scheduled to make a talk at the annual meeting of the South Dakota Public Health Association at Huron, but weather conditions prevented my making the trip. However, I did attend a meeting of the Program Committee of this organization in April.

I attended the dedication of the new Medical Science Building at Vermillion on March 27 and the Annual Medical School Dinner Dance, where I was asked to make a few remarks as President of the South Dakota State Medical Association. I sat in the Senate Chamber of our capitol building at Pierre at a hearing held by the Legislative Research Council, — the University Medical School, and other state institutions of higher learning being discussed. On May 10 I am scheduled on the program of the South Dakota Tuberculosis and Health Association annual session to talk on health councils.

I have laid considerable stress on all these various activities, because I believe that the medical profession generally does not take enough interest in various organizations which concern themselves with particular aspects of the health of the people. I have heard physicians complain about lay people controlling the activities of such organizations as the Public Health Association, Tuberculosis and Health Association, Cancer Society, Heart Association, Mental Health Association, Society for Crippled Children, School Health Organizations, Health Councils, etc. these same physicians do not take an active interest in these organizations and give them the benefit of their education and experience which would be gratefully received by these organizations. If we do not want these organizations run entirely by laymen, the medical profession must attend their meetings and take an active interest in their affairs.

The numerous conferences with many different people representing varied organizations, telephone calls, and innumerable letters necessitating much correspondence have kept me constantly aware of the importance of organized medicine, particularly our State Medical Association. My sincere thanks are extended to all who have helped me so generously during the past year, particularly the officers and Executive Secretary, Foster, and his office staff.

R. G. Mayer, M.D. President

The Reference Committee moved the adoption of this report. Carried.

REPORT OF PRESIDENT-ELECT

As your President-Elect I wish to report that I attended all council meetings during the past year including the joint meeting of the Officers, Councillors and District Officers in Huron on September 27, 1953.

One of the most enlightening and enjoyble meetings I had the privilege of attending was the North Central Medical Economics Conference at St. Paul early in November. Of course the football game on the preceding day had no effect on the pleasure angle.

Preceding the AMA Clinical meeting at St. Louis, December 1-4, I attended the Medical Public Relations Conference. On February 28 I had the pleasure of attending the Midwest Conference on Veterans Medical Care sponsored by the AMA Council on Medical Services. Our state society was exceptionally well represented by the relatively large group of its members at this meeting as well as at the meetings at St. Paul and St. Louis.

In soon assuming the duties of President of your Association, I sincerely hope that I can in some small way repay you for the faith you have placed in me. Following in the foot steps of my predecessors will not be easy. I will certainly need your help.

A. W. Spiry, M.D.

The Reference Committee moved the adoption of this report. Carried.

REPORT OF VICE-PRESIDENT

As Vice-President I wish to report that I attended all the meetings of the Council during the past year except the one in January at which time I was on vacation in Florida.

Also attended the North Central Conference held at St. Paul, November 1, 1953, together with all the officers and many members of the State Medical Society. Registration figures reached nearly 100 delegates and members, including physicians from Iowa, Nebraska, Minnesota, North Dakota, South Dakota and Wisconsin. H. Russell Brown handled the meeting in a very excellent manner. Pres. R. G. Mayer gave a very interesting talk on professional liability insurance. This meeting was indeed an inspiring one which should be attended by all members of our State Medical Association.

One meeting of the Executive Committee, which was to be held in Aberdeen in conjunction with the Executive Committee of the North Dakota State Medical Association, had to be postponed because of blizzard conditions. Our Executive Secretry got as far as my living room that day.

I hereby respectfully submit this report to the House of Delegates.

F. D. Gillis, Sr., M.D.

The Reference Committee moved the adoption of this report. Carried.

REPORT OF THE SECRETARY-TREASURER

Your Secretary is becoming a little more familiar with his job at present and is now in a position to occasionally voice an opinion about important matters that arise. Since my report last year the business has been pretty routine.

I think we are fortunate in having the services of a hard working competent Executive Secretary. He is running the affairs of his office so expertly that we seldom have reasons for conference. The job he has entails much travel and many meetings and he deserves a pat on the back for his good work.

I think also we should feel proud about the important appointments that Dr. H. Russell Brown was given by the AMA. I predict that he will become prominent nationally in the AMA circles.

I think that the chairman of the Council, Dr. R. E. VanDemark deserves commendation for his tactful handling of the chairmanship of the council. His work is efficient, well done, and all of this in spite of having one of the largest practices in our community.

In closing, I hope that if there is anything of a medical nature which this office can in any way be of assistance, you will feel free to communicate at any time. We are again and again going to have problems coming up in the legislation and we really desire your suggestions, comments and questions.

Federal funds for nursing and convalescent homes are in the offing. I wish to point out that such homes should be built near existing hospitals and supervised by such hospitals or the homes will get run down and not be nearly as useful as possible. Please write Sec. Hobby to this effect or our representatives and senators.

G. I. W. Cottam, M.D.

The Reference Committee moved the adoption of this report. Carried.

TREASURER'S REPORT Statement of Operations May 1, 1953 to April 30, 1954

State dues ______\$31 484 25

Income

ψυ1,TUT.Δυ
8,293.75
5,493.57
351.14
31.01
25.00
\$45,678.72
\$ 8,874.99
2,962.50
420.00
583.64
1,109.49
468.59
1,510.00
1,452.62
2,555.74
224.34
4,632.82
_ 1,435.43
8,293.75

Postage

Donation — Benevolent Fund

Personal Property taxes _____

Social security tax expense

Depreciation expense

expense _____

Group insurance — promotion

562.97

231.76

400.00

138.75

302.78

45.10

Insurance expense _____

41.65

Total disbursements _____\$36,246.92 CPA Audit made by John W. Sorenson, Sioux Falls.

The Reference Committee moved the adoption of this report. Carried.

REPORT OF THE EXECUTIVE SECRETARY

The fiscal year 1953-54, half of which was operated under an expanded budget and greater activities, was a most active one for the executive secretary and his staff. The staff, in addition to the executive secretary consisted of Miss Helen Sundstrom, office secretary; Miss Phyllis Sundstrom, chief clerk in charge of V.A. program; and Mrs. Dorothy Weck, assistant editor of the Journal. Mrs. Weck is employed on a half-time basis. A breakdown of activities follows:

1. Placement Service

During the year we provided information on request to 40 physicians and 16 communities. It is not possible to state just how many placements were consummated on the basis of this information but five known placements show up in the record. The main increase in activity of the placement service is in the number of physicians looking for locations which indicates an easing of the so-called shortage of doctors.

2. Publications

As business manager of the Journal, I have supervised its financial operation and the mechanics of its publication. This year we published more pages of every type of material, had more funds on which to operate and were able to "dress-up" headings of articles to improve the Journal format. As approved by the House of Delegates in 1950, the executive secretary received 1/3 of the surplus at the end of the calendar year which mounted to \$842.27 an increase of \$84.27 over the year before. On behalf of the Rural Health Committee, we published a survey on health facilities in South Dakota in 1954.

3. Liason With Other Groups

I have represented the Medical Association as president of the South Dakota Mental Health Association (term expired October 1953), Vice-President of the South Dakota Public Health Association, President of the South Dakota Hospital and Home Association (term expired in October 1953), a member of the Board of Directors of the Minnehaha County Mental Health Center and South Dakota Heart Association, a member of the Governor's Committee on Children and Youth, Conference of Social Agencies, Advisory Committee to Superintendent of Yankton State Hospital, and closely involved in activities of the State Department of Health, TB Association, Physical-Therapy Association, State Hospital Association, and many others. In keeping up with these liason duties, which tend to increase, I have attended 42 meetings during the year, 17 more than the year before.

4. Home Town Medical Care Plan

During the year I supervised operation of the V.A. Home Town Care Plan which is handled by the chief clerk. \$22,028.00 worth of medical care was provided by South Dakota doctors which was a decrease of \$2,376.56 from the year before. Cost of operating the program, which is borne by the V.A., was \$2,924.09, sum slightly less than the previous year.

5. Legislation

This was not a legislative year in South Dakota but I have had occasion to represent the Association at two meetings of the legislative research council and to do research work on a bill to license physical-therapists which will be introduced at the next session of the legislature.

Very little national legislation has called for much action except for the Bricker-Amendment which our two Senators cosponsored.

6. Advisory Committee to Selective Service

Fortunately, the "doctor-draft" was not too active during the year, calls having been suspended after July 1, 1953. However, several South Dakota doctors did go into service and correspondence with the military establishment and the National Selective Service Advisory Committee continued at a high rate.

7. Information Service

For the eighth straight year the executive office had a definite increase in the number of requests for information, both from the public and the medical profession. In many cases action by the office was requested in addition to the information.

8. Board of Medical Examiners

The executive-secretary of the Association

also acts as executive-secretary of the Board of Medical and Osteopathic Examiners. In this regard I interview applicants for licensure, carry on heavy correspondence with potential licentiates, help conduct two meetings per year and supervise reciprocal licensure between meetings of the Board. I have also prepared the minutes of the Board and made their reports to state officials.

9. Committee Work

During the year I have kept minutes for and attended meetings of the Committee on Medical School Affairs, Committee on Veterans Administration and Military Affairs, Committee on Prepayment Insurance, and the Committee on Interprofessional Relations. In addition I have handled correspondence for many committees, and have conducted a survey among doctors on V.A. medical care.

10. Office Routine

The least noticed, but one of the most time consuming parts of operating an executive office, is the routine work load. Collecting and recording dues, handling the Association, V.A., Journal, Benevolent Fund, and Endowment Association accounts, preparing rosters, giving out phone information, and answering heavy volume of mail, all take a large portion of the staff time. According to a survey of our mailing records we sent out approximately 32,000 pieces of mail during the year.

Due credit for the smooth functioning of this part of Association activity must be given Miss Helen Sundstrom who handles much of the routine matters and takes complete charge in my absence from the office.

11. Public Relations

This year a budgetary allowance of \$2,000 was set up for public relations. Feeling that internal relations are as important as external relations, the Council authorized some of this money to be spent for a reflective "MD" emblem for the cars of Association members. I was called upon by the AMA to speak at its Public Relations institute in Chicago and was able, through many public appearances to spread the story of good medicine to many people.

Close contacts with press and radio have been maintained and awards have been set up to honor radio stations and newspapers for excellence in reporting in the field of health.

Selection of doctors for 50-year awards,

Distinguished Service, and GP of the Year have added to the good public relations of the organization.

Appearances I have made and meetings I have attended follow:

May 3—Met with the Committee on VA and Military Affairs in Huron.

May 5-6—Spent two days with Mr. Aubrey Gates of AMA'S Rural Health section.

May 7—Discussed Rural Health with members of the extention service at State College in Brookings.
May 8—Appeared on a TV spot on behalf of
Mental Health.

May 9—Drove to Minot, North Dakota, with Dr. Mayer and appeared before the North Dakota Association's House of Delegates on the joint meeting and also cooperation in setting up a Dakota Medical Journal.

May 12—Met with Marvin Whealey, executive secretary of the State TB & Health Association.

May 14—Met with Dean Trippler, editor of the

Canova Herald and that evening attended the annual meeting of the Minnehaha County Mental

Health Center.

May 19—Spoke to a Washington High School Sociology class on Mental Health.

May 26—Visited the states attorney of Lake County in Madison to discuss illicit practitioners

in that county.

May 28, June 3—Attended the AMA National
Meetings in New York.

June 8—Attended Mental Health Ass'n. Board of Directors meeting in Huron and the mid-year meeting.

June 10—Left for Rapid City for the Annual

Meeting of the SDSMA.

June 13-16—Annual Meeting in Rapid City. June 17-18—Supervised medical Board examinations and attended Board meetings at the Game Lodge in the Black Hills.

June 23—Spoke on School Health at Southern

June 23—Spoke on School Health at Southern State Teachers College in Springfield.

June 25—Attended Board of Directors meeting at the Mental Health Center, Sioux Falls.

June 29—Drove to St. Louis and spoke at the annual banquet of the Cooperative Health Federation of America at Lefferson Hotel Returned to tion of America at Jefferson Hotel. Returned to Sioux Falls July 1.

July 7—Spoke on School Health at Black Hills
Teachers College—Spearfish.

July 14—Attended the PTA Board of Directors

meeting in Brookings.

July 20—Drove to Lake Preston to investigate hospital situation and write a story on it for the

Dakota Farmer.

July 24—Met with a state-wide committee in Sioux Falls to discuss degree nursing programs.

July 29—Spoke to Mitchell Kiwanis Club and later in the day met with Drs. Yohe and Fraser of Yankton State Hospital in Sioux Falls.

July 30—Attended meeting of Mental Health Center Board in Sioux Falls. Aug. 1—Attended a Mental Health Board of Di-

rectors meeting in Huron. Aug. 6—Attended the 3rd district meeting at Brookings Country Club.

Aug. 8—Met with the Committee on Medical Economics in Huron.

Aug. 11-14—Attended Black Hills District meetings of Fish Environments.

Aug. 16-29—Vacation.

Aug. 31—Left for Chicago for a meeting on VA

Medical Care.
Sept. 2—Attended public relations meeting.
Sept. 3—Gave a talk on public relations at the National Public Relations Institute. Sept. 5—Returned to Sioux Falls.

Sept. 6-12—Attended State Fair where we had

an association exhibit.

Sept. 10-Talked to Rotary Club in Mitchell on Mental Health.

Sept. 17—Met with Board of Directors of Minnehaha County Mental Health Center.
Sept. 21—Talked to Viborg PTA.
Sept. 22—Met with Dr. Neuwirth on the Senile Study he is conducting and later in the day met with individuals interested in the Mental Health movement in the state.

Sept. 23—Spoke to Kiwanis Club at Milbank and later in the day attended a meeting of the 12th

district medical society at Webster.

Sept. 26—Attended Medical School Affairs Com-

mittee meeting in Huron.

Sept. 27—Council Meeting.
Sept. 28—Met with a group in Sioux Falls to study the possibility of prosecuting illegal practitioners in the State. Sept. 29—Left for Chicago.

Sept. 30, Oct. 2-Attended Conference on School

Health in Chicago.

Oct. 5—Met with editor of the Auxiliary Newsletter in Sioux Falls.

Oct. 8-Attended 3rd District Medical Society

meeting in Flandreau.

Oct. 9-Attended meeting of S. D. Hospital and

Home Association in Huron.

Oct. 12—Met with Mr. Dean Miller, vice president of Central States Insurance Company, to discuss approval of their policy.

Oct. 13—Left for Sanator to attend the 9th district medical society meeting. Met later that day with Mrs. Marceline Jaques of the National Crippled Children's Society.
Oct. 14—Attended the Mental Health Annual

Meeting in Pierre.

Oct. 15-16—Acted as chairman of a group discussing medical care at State Social Welfare conference in Pierre.

Oct. 20—Met with the Mayor of Sioux Falls on parking problems of doctors. That evening attended Sioux Valley Hospital staff meeting to discuss group life insurance plan.

Oct. 21-Met with Mrs. Reding, editor of Auxil-

iary bulletin.

Oct. 22—Attended 8th district medical society meeting in Yankton.
Oct. 23—Met with Dr. Reagan who had been selected as S. D. General Practitioner of the Year.

Oct. 25-Met with representatives of the American Legion to discuss a joint committee for further discussions on veterans medical care.

Oct. 29-Attended Pierre District Medical So-

ciety meeting in Pierre.

Oct. 30-Left for Minneapolis to attend North Central Conference.

Oct. 31, Nov. 1-Attended North Central Conference.

Nov. 3-Met with Watertown District Medical Society.

Nov. 4—Drove to Mobridge with Dr. Mayer to attend 11th District meeting.

Nov. 5—Attended Rapid City medical society

meeting in Rapid City.

Nov. 6-Had lunch with Dr. Hayes in Winner and then attended Winner District meeting that evening.

Nov. 8-Left for Chicago for State Journal Ad-

vertising Bureau conference.

Nov. 9-11-Attended this conference with Dr. Mayer and other members of staff.

Nov. 18-Met with a committee in Sioux Falls to consider the problem of illegal practitioners. Nov. 19-Met in the afternoon with a joint com-

mittee on Patient Care in Huron and that evening wih Huron District Medical Society.

Nov. 20—Attended meeting of S. D. Public Health Association in Huron.

Nov. 26-27-Spent two days with Mr. Bernard

Kapell of the American Heart Association on program and future of the Heart Association in State. Dec. 11-Met with executive committee of S. D.

Public Health Ass'n. in Pierre.

Dec. 14—Met with members of committee to study illegal practitioners and along with Mr. Dunham, attorney general of the State. That evening I spoke at a PTA Meeting in Irene.

Dec. 17-Attended Board of Directors meeting of

Minnehaha County Mental Health Center.

Dec. 19-Attended Heart Association meeting in Huron.

Dec. 20—Dr. Peiper, a new physician in Mitchell, came to the house to discuss licensure.

Jan. 7-Spoke to Rotary Club at Winner.

Jan. 12—Attended Board of Directors of Mental Health Association meeting in Huron. Jan. 14—Spoke at Junior History Club in Sioux

Falls.

Jan. 16-Left for Aberdeen to confer with com mittee on N. D. doctors on a joint meeting in 1956 — got as far as Mitchell where I was stopped with information that N. D. committee could not get out of Bismarck to get to Aberdeen. Spent the afternoon with Dr. Gillis at his home.

Jan. 19-20—Met with Board of Examiners and

later that day prepared a recorded broadcast for radio station KELO on Heart Disease with Dr.

Kegaries.

Jan. 21-Met with Board of Directors of Mental

Health Center in Sioux Falls.

Jan. 23-25—Attended legislative meetings of AMA in Denver.

Jan. 27-Met with a doctor in office concerning licensure an alleged illegal practice. Later in day met with County Commissioners of Minnehaha County on Mental Health matter and then met a delegation from Hudson who were interested in securing services of a doctor.

Jan. 29—Went to VA and discussed Physio-

Therapy licensure with head of physio-therapy

department there.

Jan. 30—Attended committee on Medical School Affairs Committee in Huron and also one of liason committee with State Board of Health.

Feb. 2—Attended 7th district medical society

meeting. Feb. 6-10—Attended Federation of Medical

Feb. 11—Spoke to Kiwanis Club in Brookings. Feb. 15—Spoke to Parker Lions Club. Feb. 16—Attended meetings of Advisory Com-

Feb. 17—Spoke to Arlington Kiwanis Club. Feb. 18—Attended Board of Directors meeting of

Feb. 18—Attended Board of Directors meeting of Mental Health Center.
Feb. 19—Met in Vermillion with Advisory Committee to Yankton State Hospital.
Feb. 22—Spoke to Marion PTA.
Feb. 24—Spoke to Woonsocket Kiwanis Club.
That evening met with Medical School Affairs Committee in Huron.
Feb. 25-26—In Omaha discussing approval of insurance policy with Mutual Benefit of Omaha.

insurance policy with Mutual Benefit of Omaha.

Feb. 28—With Dr. D. H. Manning attended AMA'S VA discussion meeting in Omaha.

March 1—Spoke to Burke Chamber of Commerce

and stayed overnight at home of Dr. Quinn

March 2-Spoke to Wessington Springs Kiwanis Club.

March 3-7—Attended National Rural Health Con-

ference in Dallas, Texas.

March 10—Spoke to Watertown Cosmopolitan Club. Then drove to Huron to make arrangements for coming Annual Meeting.

March 16—Attended District Medical meeting

in Huron. March 17-Drove to Aberdeen where I met with Mr. Lyle Limond, executive secretary of the North Dakota Medical Association on the proposed 1956

annual meeting.

March 18-Returned to Sioux Falls to attend

Mental Health Center Board of Directors meeting.

March 19—Went to meeting at Veterans Administration to discuss payment of DP physicians rendering services on Association's Home Town Care program.

March 24—Attended Yankton District meeting at Sacred Heart Hospital.

March 25-Spoke to Pierian Study Club in Sioux Falls.

March 27-Attended Medical School Dedication

in Vermillion.

March 28-30—Attended meetings of Little Hoover Commission in Pierre.

April 2-Again in Pierre to attend meetings of Little Hoover Commission on behalf of Associa-tion. Later that night attended State Hospital Association banquet in Huron.

April 3-Spoke to Hospital Association body on uniform report forms. Later in day met with program committee of Public Health Association.

April 4-Met with Insurance Committee in Huron.

April 6-Attended meeting of Sioux Falls Dis-

trict medical society.

April 7-Attended Annual Meeting of Minne-

haha County Mental Health Center.

April 8—Spent day with Mr.Hugh McKenna of Mutual of Omaha who was discussing approval of

their health and accident policy.

April 9—Spent part of day with Mr. Kessis of the Indian Agency discussing medical care for Indians. Later in day met with Mr. Jim Waage of United Press to do a story on Rural Medical Care in South Dakota and left that day for Pierre to attend a meeting of Mental Health Association.

April 10-Acted as resource person for Mental

Health program.

April 11—Attended joint committee meeting of American Legion and Medical Association on vet-

erans medical care.

April 12—Spoke to Rotary Club of Sioux Falls,
April 15—Attended Board meeting of Minne-

April 13—Attended Board meeting of Minnehaha County Mental Health Center.

April 17—Met with committee on Interprofessional Relations in Watertown — driving there with Dr. Dobert VanDemark.

April 21—Spoke to Selby PTA.

April 22—Attended Association of Clinic Man-

agers meeting in Mitchell.

April 28—Attended Board meeting of State PTA in Yankton.

April 29—Drove to Revillo to check on Board of Medical Examiners matter.

April 30-Left for Physical Therapy meetings in Pierre to discuss Physio-Therapy legislation with that group while in conference. Met with Insur-ance Committee of South Dakota Hospital Association on uniform insurance report blanks.

John C. Foster

Executive Secretary

The Reference Committee moved the adoption of this report. Carried.

REPORT OF DELEGATE TO AMA

This annual session began with a Sunday meeting on May 31, 1953, of the Conference of Presidents and other State Medical Association Officers. This interesting meeting was held at the Waldorf-Astoria Hotel which was also the headquarters hotel for the House of Delegates, Officers and entire AMA staff.

The House of Delegates convened on Monday, June 1 at 10:00 a.m. This was the 102nd

annual session of the American Medical Association. The ultimate total attendance in the house was 180 members out of a possible 185. The South Dakota State Medical Association was represented at all of the sessions and at some of the reference committee hearings by your alternate delegate, Dr. A. A. Lampert of Rapid City. Your delegate also attended all of the sessions being charged with the additional responsibility of Chairmanship of the Reference Committee on Reports of Board of Trustees and Secretary.

This was the biggest and largest attended meeting that has ever been held by the American Medical Association. Almost 18,000 physicians took part in the meeting. The total registration of those in attendance approached 49,000. The scientific sessions were of excellent quality and were well attended. The scientific exhibits were up to their usual high standard and attracted a large attendance. A tremendous number of technical exhibits were on display. The scientific and technical exhibits were displayed at the Grand Central Palace.

The speeches presented by the outgoing president and the incoming President Edward J. McCormick, were frank, factual and critical, as well as inspiring. Each member of the medical profession should read and study both of these addresses. In them our problems are described and methods of solution are proposed.

Many notable persons were introduced and spoke to the House of Delegates. Of most note, however, were Mrs. Oveta Culp Hobby, Secretary of Health Eduction and Welfare, and Mr. Lewis K. Gough, National Commander of the American Legion.

A multitude of resolutions were introduced. in the House. The subjects most greatly concerned in these resolutions were the action taken at the Denver meeting with regard to a change in the standards for internship and also the action at that meeting with regard to the handling of government paid medical care for veterans with non-service connected disabilities. A great many resolutions were also introduced with regard to the interview of Dr. Hawley by the United States News. The interim report of the Special Committee and Board of Trustees concerning osteopathy was the subject of the greatest controversy. A decision on the recommendations of this Special

Committee was held in abeyance for one year, pending consideration and advice from the various State Medical Associations. It will again be considered at the annual meeting in 1954.

A complete discussion of the various matters considered and decisions reached would be too lengthy for this report. It is recommended that each physician read the proceedings of the House as they appear in the Journal of the American Medical Association to familiarize himself with the various actions taken. Many matters of great importance to all of us were considered and each should acquaint himself with the problems and decisions because some of these matters are to be the subject of State Medical Society consideration and decision. Therefore, at a later date your delegation to the AMA will expect advice with regard to the wishes of the State Association.

The meetings concluded with the election of new officers. Dr. Walter B. Martin, Norfolk, Virginia, became the new president-elect. His position on the Board of Trustees, which became vacated when he was elected was filled by the election of Dr. Julian P. Price, Florence, South Carolina. Dr. Edwin S. Hamilton, Kankakee, Illinois, and Dr. Gunnar Gunderson, LaCrosse, Wisconsin, were both reelected as members of the Board of Trustees.

H. Russell Brown, M.D.

REPORT OF DELEGATE TO A.M.A. CLINICAL SESSION AT DENVER

The House of Delegates of the American Medical Association met at the semi-annual session in the Jefferson Hotel at St. Louis, Missouri, on December 1st — 4th, 1953. This was the Seventh Annual Clinical Session and was heavily attended. There were present 2,730 physicians and the total registration exceeded 7,700.

The special committee of the A.M.A. Board of Trustees selected as the 1953 General Practitioner of the Year, Dr. Joseph I. Greenwell of New Haven, Kentucky. His selection was announced at the opening session of the House of Delegates and he was presented with the annual medal and citation "for community service by a family physician" by Dr. Edward J. McCormick of Toledo, Ohio, President of the American Medical Association.

This session of the House of Delegates was

relatively quiet and free from controversy. Thirty-four resolutions were presented, but reference committee reports resulted in very little discussion on the floor. The House, however, did take important action on Social Security, Voluntary Health Insurance, Medical Ethics and Unethical Practices, Medical Education, Hospital Accreditation and Military Affairs. The various resolutions presented concerned a wide variety of other subjects. For a detailed report of action and decisions on the various matters considered by the House of Delegates, each physician is urged to read the Abstract of the Proceedings of the House of Delegates as printed in the Journal of the American Medical Association.

Your delegate and alternate delegate attended all of the sessions of the House and many of the sessions of the Reference Committees. Since the time of your delegate was largely taken up with membership on the Reference Committee for Military Affairs, it was particularly important to have present our alternate delegate, Dr. A. A. Lampert, who was able to attend other reference committees who were considering matters of importance to us in South Dakota.

In the opinion of your delegate it is extremely important that the South Dakota State Medical Association continue in the future to be represented at the House of Delegates by both its delegate and alternate delegate.

H. Russell Brown, M.D.

The Reference Committee moved the adoption of this report, Carried.

REPORT OF ALTERNATE DELEGATE TO AMA

As alternate delegate from the South Dakota Medical Association, I have now attended two AMA meetings. The Annual session in New York City in June of 1953 was a huge meeting attended by nearly 50,000 physicians and highlighted by an excellent scientific and technical program. The clinical session in St. Louis in December 1953 was attended by approximately 10,000 physicians. Its clinical and technical programs were second to none offered for the general practitioner.

The House of Delegates conducted at each meeting a multitude of business. Dr. H. Russell Brown, your delegate, reports the business of the house in an excellent fashion. His report must be brief. For that reason he can-

not convey the urgency of many of the controversial subjects discussed. More important he cannot convey the intense thought given each problem by physicians daily practicing medicine just as you and I. The Journal of the American Medical Association reports the business of the house after each meeting. It behooves each and every physician to acquaint himself with that business; to interest himself in the proper solution of the problem medicine faces today by active participation in local and state medical organization.

I would be doing a great wrong in this report without directing a few words toward H. Russell Brown of Watertown - your delegate for six years. He is one of 185 members of the house, the representative from a 'one delegate state', and for that reason would be largely ineffectual unless a man of unusual qualities. Dr. Brown knows and is known by every other house member. His opinion is sought by medical leaders of national and international reknown. He serves on committees of tremendous importance to medical practice the country over. It is not my wish to embarrass Dr. Brown - I would only again call attention to the stature of the man representing the South Dakota State Medical Associa-

A. A. Lampert, M.D.

The Reference Committee moved the adoption of this report. Carried.

*REPORT OF THE COUNCIL

Since the last session, the Council of the South Dakota State Medical Society met on June 16, on September 27 and on January 31st. Mr. John C. Foster was elected Executive Secretary for a term of three years with a salary as stipulated in the current budget. Dr. Skogmo was elected to fill out the unexpired term of Dr. Gillis from the Mitchell District.

A Committee was appointed to meet with the members of the Hospital Association and Nursing Association for the improvement of patient care. The question of traveling expenses for Committee members was referred to an appropriate committee at the June meet-

A life insurance group program for the Medical Society was approved and set up for action by the individual districts. An attempt was made to meet with Dr. Neuwirth regarding the legislative councils' research on senile problems in South Dakota but was subsequently unsuccessful. Dr. H. L. Luce and Dr. Mary Smith were appointed to membership on the medical advisory board of the Crippled Childrens School and Hospital. Dr. Resin Reagan was named General Practitioner of the Year.

At the meeting on January 31st, a discussion was held on the senile problem by the Legislative Research Council but no action was taken. Dr. Morrissey submitted a report from his Committee as to expenses of Committee members with the recommendation that every standing committee that felt it was being unduly imposed upon should submit an expense budget for consideration by the House of Delegates.

A long term study of the maternal mortality in South Dakota as required by the South Dakota Obstetrical and Gynecology Society was approved.

Also arrangements were made for setting up an indigent fee schedule for South Dakota.

R. E. VanDemark, M.D.

Chairman

Additional action of the Council taken subsequent to the preparation of this report appears in the council minutes and in the final action of the House of Delegates. The reference committee moved the adoption of this report as amended. Carried.

REPORT OF COUNCILLOR OF FIRST DISTRICT

The Aberdeen District Medical Society has conducted an active program during the past year, meeting regularly monthly, with exception during the summer. The Society consists of 34 active and 6 honorary members.

Officers: President—M. F. Williams, M.D. Vice-Pres.—J. C. Rodine, M.D. Secretary—B. F. King, M.D.

Delegates:

M. R. Gelber, M.D., and F. H. Cooley, M.D.

Alternates:

B. F. King, M.D., and C. L. Vogele, M.D.

G J. Bloemendaal, M.D., J. A. Eckrich, M.D., and Paul G. Bunker, M.D. P. V. McCarthy, M.D.

REPORT OF COUNCILLOR OF SECOND DISTRICT

Total Members: 27 Paid up to Date: 16

Special activities for the year.
1. Cooperated with the schools in providing pre-

school physical examinations.

2. Carried out immunization program in cooperation with the City Schools in Water-

3. Participated in immunization program for rural schools in Codington County. 4. Participated in Diabetes Detection Drive.

5. Aid and assisted in fund drive for the American Heart Association.

Adopted group hospitalization insurance for members and employees.

Reviews of Meetings:

May 23, 1953

One day Cancer Meeting sponsored by District Medical Society and American Cancer Society — taking place of the regular June meeting.

The Brownell, Internist Guest speaers were: Dr. Brownell, Internist of Winnipeg, Canada and Dr. Wittenborg, Pediatric Surgeon of Boston, Massachusetts.

October, 1953

Guest speakers: John Foster, executive secretary of the South Dakota State Medical Association and Mr. McGreevy who presented the Group Life Insurance Plan approved by the State Association.

November 3

Business Meeting December 1, 1953

Members present: 17 Business meeting—election of officers President—Dr. C. Rodney Stoltz Vice-President—Dr. Carroll Clark Secretary-Treasurer—Dr. O. S. Randall Delegates—Dr. A. Willen and Dr. J. Argabrite

Alternates-Dr. Romans Auskaps and Dr. Drobinsky Censors-Dr. A. Willen

January 5, 1954

Members present: 16 Dr. O. S. Randall resigned as Secretary-Treasurer and Dr. J. C. Trivett was elected in his place.

Mr. John Hartigan representing the Blue Cross Insurance plan presented a plan for Group Hospitalization for the District Society.

February 2, 1954

Members present: 18

Guest speaker—Dr. R. G. Mayer, Aberdeen, South Dakota — President, South Dakota State Medical Association.

March 2, 1954 Members present: 14

Guests—1

Program—Dr. George Smith, Neurosugeon of Sioux Falls, South Dakota

April 6, 1954

Members present: 15 Guests: 2

Program—A short talk by two members of Alcoholics Anonymous on their organization and problems. Also a film on the use of Cortisone in Clinical Medicine.

C. Rodney Stoltz, M.D.

REPORT OF COUNCILLOR OF
THIRD DISTRICT
I wish to make the following report as counsillor of the Third District Medical Society for the year from our State Meeting of 1953 up through and including the last meeting of the Third District Medical Society held on April 8, 1954.

A regular meeting was held at the Bates Hotel, Brookings, South Dakota on Thursday, June 11, 1953. Thirty-eight members and guests assembled. The scientific program was a lecture by Dr. Phillip Pugh of Sioux City, Iowa and his associate in clinical psychology, Dr. Al Canby, on Emotional Disburbances of Children. A business meeting following this began with instructions to the delegates to the State Meeting. It was the consensus of opinion among the members of the Third District Medical Society that the South Dakota State Medical Association needed to be more alert regarding legisla-tive matters having to do with the healing arts, and that special emphasis should be placed on this

at the next legislative meeting.

The next meeting was a social gathering on August 13, 1953 consisting of golf, a picnic, card playing and a big community sing for the doctors and their enter families.

The October 8 meeting was held at the Tea Room

at the Indian School at Flandreau. The scientific program featured a talk on Psychiatric Problems in General Practice by Dr. Roy C. Knowles of Sioux Falls. Following the scientific session there was a business meeting, highlight of which consisted of a discussion of the life insurance plan by Mr. Mc-Greevy and Mr. Foster. Other matters were strictly of a routine nature.

On December 10, 1953, thirty-two members, auxiliary and guests assembled at the Hotel General Beadle in Madison. There was no scientific program but a demonstration of magic was given by Dr. Saylor at the Madison Clinic. A letter from the American Medical Association dated October 19, 1953 was read before the Society. In this letter it was suggested that a committee be appointed to contact our congressmen and senators to favor proposed legislation for a pension plan for pro-fessional persons as devised and outlined in the letter by the National Committee. A committee was appointed for the study of this letter and it was suggested that the matter also be taken up with Senator Karl Mundt. It was moved and seconded that the state and local dues be paid to the secretary-treasurer of the Third District Medical Society and that the AMA dues be paid to the state secretary directly. The slate of officers from the preceding year was reelected.

On Thursday, February 25, 1954, about thirty members and guests assembled at the Bates Hotel in Brookings for dinner. Colored movies which had been taken by Dr. M. S. Grove of Sioux Falls were shown and they created much favorable comments. It was reported at the business meeting that Drs. Muggly and Whitson had personally inter-viewed Senator Karl Mundt with respect to the proposed pension plan as outlined by the National Committee and that Senator Mundt had promised to push the measure. Dr. Davidson was renominated for the position of councillor, which he now

On Thursday, April 8, 1954, a meeting was held at the auditorium in Arlington. Due to some slips there was no scientific meeting but a film was shown depicting the work of the Shrine Hospital in San Francisco. The film also included highlights of the annual charity football game in Kezar Stadium. Dr. Mayer, the state president, was present at the meeting and gave us a long and interesting talk on accomplishments and hopes for the future. He spent some time commenting on the Griffenhagen report which he felt had made unwarranted assertions in regards to free care of the senile persons in the proposed Old Peoples' Homes around the state. Better public relations with press, and especially with legislators was felt to be a "must." Suggestions were made by members that in the coming legislative session some legislation has presented in a positive nature which would tion be presented in a positive nature which would leave us on the offensive for a change and let the osteopaths and others take the defensive.

As a councilor I have attended all of the meetings of the Council and feel that we have had a very successful year. We are anxiously looking forward to the State Meeting.

Magni Davidson, M.D.

REPORT OF COUNCILLOR OF

FOURTH DISTRICT
The Fourth District Medical Society had 23 paid up members for the year of 1953 and one Honorary

member.

The first meeting was held October 29, 1953. The speakers were Mr. John Foster, State Executive Secretary and Mr. McGreevy, representing the Union National Life Insurance Company. Mr. Foster discussed the necessity of raising the dues to \$75.00 per year and explained why this had been done by the House of Delegates in May at the State Meeting. Mr. McGreevy presented the plan of group life insurance that is being offered to members of the State Medical Association.

The second meeting was held on March 29, 1954. Dr. R. G. Mayer, president of the State Medical Association, was present and discussed the policies of the Association. Mr. Foster was also in attendance at the meeting. The following officers were elected:

President—L. C. Askwig, M.D., Pierre Vice-Pres.—J. P. Janis, M.D., Hoven Sec'y-Treas.—M. M. Morrissey, M.D., Pierre Delegate—L. C. Askwig, M.D., Pierre Alternate—T. F. Riggs, M.D., Pierre Councillor—M. M. Morrissey, M.D., Pierre M. M. Morrissey, M.D.

REPORT OF COUNCILLOR OF FIFTH DISTRICT

The following is a brief resume of the Huron

District meetings held during the year:

June 10, 1953. The meeting was held at the Marvin Hughitt Hotel. The purpose of the meeting was to elect delegates and alternate delegates

November 19, 1953. The meeting was held at the Marvin Hughitt Hotel. The purpose of the meeting was two-fold: 1) A discussion by the Executive Secretary Mr. John Foster, explaining the increase in States dues. 2) A discussion of the group medical insurance plan by Mr. Joseph McGreevy, Insurance Expert

December 2, 1953. The dinner was at the Lutheran Church and the meeting continued at the Tschetter-Hohm Clinic. Election of officers was held. Dr. Herbert Trace, Cardiac and Vascular Surgeon of

Chicago, Illinois, gave a report.

A meeting to discuss plans for the coming Annual Meeting was held at the Tams Hotel in March. Mr. Foster of the executive office was present. R. A. Buchanan, M.D.

REPORT OF COUNCILLOR OF SIXTH DISTRICT

A Sixth District Meeting was held on February 12, 1953, May 4, 1953, August 3, 1953, October 21, 1953, and on March 3, 1954.

Our records show that in 1953 we had thirty-three (22) points members with the continuous members with the continuous members.

three (33) paying members, with one retired, and our 1954 records show that we have twenty-four

(24) paying members, and one retired.

The officers for 1953 were President: Wm. A. Delaney, Jr., M.D., Vice-president—William Bollinger, M.D.; Secretary-Treasurer—Don R. Mabee, M.D.; Delegate—C. S. Moran, M.D., and H. R. Lewis, M.D.; Alternate Delegates—W. H. Fritz, M.D., and D. R. Nelimark, M.D.; Censors for one year—E. C. Bobb, M.D., two years—R. A. Weber M.D., and D. R. Nelmark, M.D.; Censors for one year—E. C. Bobb, M.D., two years—R. A. Weber, M.D., three years—J. Saylor, M.D. and F. D. Gillis, Sr., M.D. as councillor. In 1954 the following were elected as officers: President—William Bollinger, M.D.; Vice-President—F. J Tobin, M.D.; Secretary-Treasurer—P. P. Brogdon, M.D.; Dr. Skogmo was re-elected councillor. (Dr. Skogmo had temporarily been appointed as Councillor of this District when Dr. Gillis Sr. was elected to his present office. Dr. Gillis, Sr. was elected to his present office. Delegates to the State Convention are F. D. Gillis, Jr., M.D. and C. I. Stevens, M.D. Alternates are Robert J. Delaney, M.D., and T. Pollerman, M.D. Censors are C. S. Moran, M.D. (Dr. Moran has since left Mitchell). Censors for one year: R. A. Weber, M.D., two years—J. Saylor, M.D., and three years—C. S. Moran, M.D. C. S. Moran, M.D.

B. R. Skogmo, M.D.

REPORT OF COUNCILLOR OF SEVENTH DISTRICT

The Seventh District Medical Society had another successful year. The membership totals one hundred twelve, four of which are honorary, four

of which are on leave of absence for military service and advance study and eight of which are members of the Veterans Administration facility. The Society accepted four transfers from other Societies and initiated four new members into the Society. Dr. R. Reagan was accorded the honor of General Practitioner of the year for South Dakota. Dr. A. F. Grove of Dell Rapids was made an honorary member of the Society.

We regret to report the passing of our most esteemed members, Dr. T. J. Billion, Sr., and Dr.

J. B. Gregg, Sr.

The officers for 1954 are as follows: President—Dr. Wm. Sercl, Vice-President, Dr. E. T. Lietzke, Secretary — Dr. C. A. Stern, and Treasurer — Dr. N. E. Wessman.

The Society has held monthly meetings through the Fall, Winter and Spring months and attendance

has been good.

The undersigned has nominated a new candidate for the Council from this District and wishes, at this time, to thank all those who so finely cooperated during his five years on the Council. The experience has been a pleasant one and is being vacated with deep personal regret.

R. E. VanDemark, M.D.

REPORT OF COUNCILLOR OF EIGHTH DISTRICT

Members: 41 Paid Up to Date: 27 New Members: 1

Deceased Members:

Dr. S. M. Hohf—June 28, 1953 Dr. A. J. Smith—December 10, 1953

Special Activities for the Year:
1. Cooperated with sponsors of immunication programs in the schools.

2. Did free urine analysis during Diabetes Detection Week.

3. Sponsored Clinics for medical students from University Medical School.

4. Assisted in drawing blood for the American

Red Cross Blood Train.

5. Sponsored, in cooperation with auxiliary, essay contest and gave \$50.00 prize money. Our district winner placed second in the state contest.

Meetings:

October 22, 1953—at State Hospital in Yankton Guests: Dr. R. G. Mayer, State President and John C. Foster executive secretary.

Speaker: Dr. Morton, Dept. of Radiology, Ohio State Medical School, Columbus, Ohio on "Radiological Diagnosis of the Abdomen."

December 9, 1953—At Sacred Heart Hospital

in Yankton

Speaker: Dr. Fred H. Stahmann, Sioux Falls on "Placenta Previa." February 3, 1954—at Sacred Heart Hospital in

Yankton

Guests: Speaker and his associate, Dr. Joseph Kell.

Speaker: Dr. Carroll Brown, Neurosurgeon from Sioux City, Iowa.
Topics: "Head Injuries."

March 24, 1954—At Sacred Heart Hospital in

Yankton

Speaker: Dr. Clyde Dawe, Dept. of Surgical Pathology, Mayo Clinic. Topic: "Cytology of Malignant Lymphomas."

April meeting to be held in Vermillion.

Officers for 1954 (elected at December meeting)
President Dr. Robert Livingston
Vice President Dr. Melford B. Lyso
Secretary-Treasurer Dr. Marian L. Auld

Delegates: Dr. Robert Livington

Dr. Melford Lyso Alternates:

Dr. J. P. Steele Dr. T. H. Sattler Censor:

Dr. D. B. Reanev

A. P. Reding M.D.

REPORT OF COUNCILLOR OF
NINTH DISTRICT
The Black Hills District has held six meetings this year. These meetings have been well attended, even though our distances to go for meetings presented considerable inconvenience.

The programs and place of meetings have been:

1. February 9, 1954

2. April 8, 1954

3. June 8, 1954

4. August 12, 1954

5. October 12, 1954

6. December 9, 1954

Rapid City Ft. Meade

Battle Mountain Spearfish Sanator Deadwood or Lead CPS 3 cases with discussion by 8 members. Dr. J. W. Martin, Mayo's "Antibiotics"

We have 98 members out of a possible 101. Most of the younger men coming to the district are interested participants in our procedure. They will gradually exert more and more influence on our

activities

Our officers this year are:
President—H. J. Grau M.D., Rapid City
Vice-Pres.—William E. Jones, M.D., Sturgis
Secretary—J. J. Feehan, M.D., Rapid City A. A. Lampert, M.D.

The reports of the Councillors from the first to ninth destricts inclusive were approved. Carried.

REPORT OF COMMITTEES AS ADOPTED BY THE HOUSE OF DELEGATES

REPORT OF THE COMMITTEE ON SCIENTIFIC WORK

The scientific program of the 1954 Annual Session of the Association is the work of this Committee. This includes:

"Oral Cancer — The Problem of Early Diagnosis"

— film "The Early Recognition and treatment of Hip Disorders in Infants and Children,"

Carroll B. Larson, M.D., Iowa City.

"Cardiovascular Surgery," E. H. Fell, M.D.,

Chicago.

"Urologic Diagnosis in General Practice" — C. D.

Creevy, M.D., Minneapolis. "Cardiac Arrest," E. H. Fell, M.D., Chicago. "Lung Cancer As Seen by the Endoscopist," John

B. Gregg, Jr., M.D., Sioux Falls. "Pediatric Surgery," John L. Keeley, M.D.,

Chicago.

"Differential Diagnosis and Treatment of Benign Lesions of the Lower Esophagus," W. E. Adams, M.D., Chicago. "Hip Disorders in Adults with References to Diagnosis and Treatment," Carroll B. Larson,

M.D., Iowa City. "Congenital Malformations of the Heart — Cyanotic Heart Disease" — film.

"The Management of Diabetic Coma," F. R. Keating, Jr., M.D., Rochester.
"Multiple Myeloma," Lester R. Wold, M.D.,

Fargo.

"Use and Abuse of Drug Therapy," Arthur E. Grollman, M.D., Dallas.

"Practical Aspects of Anticoagulant Therapy,"
Franklin A. Kyser, M.D., Chicago.
"Modern Aids for the Clinical Evaluation of Thyroid Function," F. R. Keating M.D., Rochester.
"Hypertension," Arthur Grollman, M.D., Dallas.
"Accidents," Ralph C. Moore, M.D., and Charles Marsh M.D., Omaha.

It has been suggested that the South Dakota State Medical Association and the University Medical School co-operate in organizing some Post-Graduate clinics or lectures to be presented in various cities in the state, and also that the Medical Association and the Medical School co-operate in experimental research projects. The Committee on Scientific Work recommmends such a program for 1954-1955, if feasible.

R. G. Mayer, M.D., Chr. A. W. Spiry, M.D. G. I. W. Cottam, M.D.

The Reference Committee moved the adoption of this report. Carried.

REPORT OF THE COMMITTEE ON PUBLIC POLICY AND LEGISLATION

Since the state legislature will meet in January, 1955, the Committee on Public Policies and Legislation recommends that every member and committee desiring special legislation bills introduced present their recommendations in writing to the Executive Secretary before the September meeting of the Council, so that adequate consideration may be devoted to the preparation of such bills. Changes in the laws have been suggested for such subjects as revision of fees in Workmen's Compensation cases care of the indigent, regulations for optometrists and ophthalmologists, coroners, and autopsies, care of the senile, re-organization of the ex-ecutive branch of the Government, formation of a Department of Health and Welfare, and changes in the setup for various boards of examiners. Every member should study these proposals and recommendations and inform the members of the Council of their views.

R. G. Mayer, M.D. Chairman A. W. Spiry, M.D. The Council

The Reference Committee moved the adoption of this report. Carried.

REPORT OF THE COMMITTEE
ON PUBLICATIONS

During the past fiscal year the "South Dakota Journal of Medicine and Pharmacy" published 750 pages, an increase of 86 pages over the previous year. Editorial, scientific and news material covering 403 pages were published which was an increase of 48½ pages. Advertising increased to 347 pages which was 36½ pages more than the year before before.

Financially, the Journal had receipts of \$16,671.87 and expenses of \$14,186.67.

Scientific or medical economic articles totaling 32 pages were printed, 17 of these being products of South Dakota authors.

No further progress has been made by the Committee in persuading North Dakota to join in the publishing operation. However, the Editor and the Executive Secretary have talked to various physicians in North Dakota and also to the Executive Secretary of the North Dakota State Medical Association at various times about this matter.

The Committee especially commends the Assistant Editor Dorothy Anderson Weck for her constant efforts to improve our publication. The Committee also wishes to compliment our Business Manager, John C. Foster, for his excellent work in handling the finances of our publication.
R. G. Mayer, M.D., Chr.
C. S. Roberts, Jr., M.D.
D. H. Manning, M.D.

The Reference Committee moved the adoption of this report. Carried.

REPORT OF THE COMMITTEE ON MEDICAL DEFENSE

There has been no meeting of this Committee during the fiscal year because no case regarding medical defense has come before the attention of this committee.

I hereby respectfully submit this report to the House of Delegates.

F. D. Gillis, Sr., M.D., Chr. M. W. Pangburn, M.D. V. V. Kobza, M.D.

Your Reference Committee views the lack of activity of the Committee on Medical Defense with much misgiving. Malpractice lawsuits and malpractice insurance are subjects receiving intense study by national medical organizations. South Dakota physicians during the past year have been involved in several instances. Your reference comitmete believes that a statewide analysis of this problem and local recommendations would be advantageous to the organization as a whole.

REPORT OF THE COMMITTEE ON MEDICAL SCHOOL AFFAIRS MEDICAL EDUCATION AND HOSPITALS

The committee met three times during the year. Recommendations made by the group follow:

It is recommended that funds of the South Dakota Medical School Endowment Association in excess of current needs for student loans be placed

in government bonds. (Approved by the Endowment Association and action taken.)

It is recommended that the Medical Association cooperate with the University of South Dakota Medical School in a program of post-graduate education on an extension basis.

education on an extension basis.

Further recommendations on the "Little Hoover Commission" studies on higher education by Grif-fenhagen and Associates follows: Research Recommendation "A"

"The extremely high per student cost of op-erating the school of Medicine should be re-duced. This can be done by increasing the number of students and not the staff by assigning work in other parts of the college to the medical professors or by reducing the number of salaries of the medical staff."

Medical School Affairs Committee Recommenda-

tion on above

The State Medical Society has rightfully concerned itself with the problems in medical education in the State of South Dakota and have shown particularly active regard in this matter during the past ten years. This organization passed a resolution in 1947 to the effect that in view of the limited population and resolution in the state of the limited population and resolution in the state of the limited population and resolution and resolution and resolution are stated as a second control of the state of the ources of the state it did not seem feasible at that time to expand our medical education facilities to the full four-year program. This resolution further contained the provision that the state should direct its efforts to the development and maintenance of the best possible basic science school. Since the date of the resolution, the State Society has taken a very active role in implementing the provisions of this resolution. A standing committee, a Medical School Affairs Committee, has periodically re-ceived reports on the developments of the University School of Medicine and has made recommendations to its administrative officer and faculty with the purpose of improving the status of medical education in the state.

The Medical School Affairs Committee has noted newspaper reports of the recommendations of Griffenhagen and Associates and has undertaken its own survey of some of the matters referred to in the report offered by

that organization.

The Committee views with alarm the recommendations which would presume to reduce the cost of operating the School of Medicine. First, the figure of \$2,100 per medical student per year is one of the lowest in the country as based on operating budget. Of seven basic science institutions, four have operating budgets very nearly double the budget of the medical school. Still the number of medical students educated therein are not significantly higher than at South Dakota. Secondly, a strictly comparable school to South Dakota is the Medical School of North Dakota which presently is operating on a budget one-third above the present budget for the South Dakota Medical School.

This Committee views with absolute alarm any suggestions to reduce the staff or salaries as such action would immediately jeopardize the present efficiency in the teaching program at the Medical School. Further any action of such major importance would very likely mean non-accreditation for the medical school. Were this to transpire it is freely predicted that it would be the end of medical education in the state for other medical schools would not accept our medical students for transfer

for the completion of their work.

This Committee has reviewed salary schedules of a total of some forty other medical schools in the country. It is to be noted that there is on the average a difference of \$1,000 for each teaching rank between the salaries paid at the University of South Dakota and the median level at some forty other schools. It is self-evident that salary adjustments must be made in a upward direction if a qualified staff is to be maintained.

There is a suggestion in the report of Griffenhagen and Associates that medical education in terms of cost as well as in regard salaries paid staff is being compared with other schools within the State and that this has completely ignored the established fact that the medical school of South Dakota must be compared with other medical schools in attempting to

assay any costs involved.

It is inconceivable to the committee that any recommendation to reduce costs to improve

teaching can accomplish its purpose.

Research Recommendations "B & C"

"Nursing education should be transferred from State College to the School of Medicine at the University. The Division of pharmacy of State College should be transferred to the School of Medicine at the University."

Medical School Affairs Committee Recommen-

dation on above . .

In relation to the nursing and pharmacy education program and the medical school it seems logical that the qualified scientific staff at the University of South Dakota could enhance these programs considerably.

Research Recommendation "D"

"The State Health Laboratory, in the school of medicine at the University exists only in law and not in fact. Its functions have been as-sumed by a division of laboratories in the department of health that is located at Pierre. The law providing for the state health labora-tory should be repealed and the agency abolished unless the health department transfers its laboratory work back to the University.
Medical School Affairs Committee Recommen-

dation on above.

The Committee feels that qualified personnel and excellent facilities now at the University of South Dakota School of Medicine can not be utilized to the maximum and for the best interest of the medical profession and the public unless designation is made of the facilities as a State Health Laboratory.

Assets of the Medcal School Endowment Asso-

ciation are listed:

Cash on deposit 1st Nat'l Bank Sioux Falls Government Bonds Outstanding Student Loans

\$3,132.62 2,000.00 1,250.00

_\$6,382.62 C. B. McVay, M.D., Chr. H. Russell Brown, M.D. F. R. Williams, M.D. TOTAL

Ronald Price, M.D. W. H. Saxton, M.D. L. J. Pankow, M.D.

The Reference Committee moved the adoption of this report. Carried.

REPORT OF THE COMMITTEE ON MEDICAL ECONOMICS

The Committee met once during the year at which time the Group Life Insurance plan was discussed. A recommendation to adopt such a plan was made to the Council and action to accomplish this was made.

The Committee recommended that no action be taken on collection of "loss-of-time" premiums for Paul Revere Company. This recommendation was also accepted by the Council.

The Committee had previously recommended the committee had been also bee

adoption of a uniform report form which is now in the process of being prepared by the Association executive secretary in cooperation with the State Hospital Association and the Association of Clinic Managers.

M. C. Tank, M.D., Chr. P. R. Scallin, M.D. C. R. Stoltz, M.D.

The Reference Committee moved the adoption of this report. Carried.

> REPORT OF THE COMMITTEE ON NECROLOGY

The Committee wishes to report the death of the following physicians in the state during the past

S. M. Hohf, M.D., Yankton Surgeon, passed away on June 28, 1953 at the age of 80. Had been ill

for several weeks.

T. J. Billion, Sr., M.D., Sioux Falls, oldest practicing physician in the State of South Dakota, passed away on July 8, 1953 at the age of 74. Death was due to a dissecting aneurysm.

A. A. Privka, M.D. passed away in Kennebec, South Dakota after practicing there less than a year. Death was due to a malignant condition.

D. S. Kalayjian, M.D. passed away in Detroit at the age of 86 on September, 1953. Dr. Kalayjian had been a long time Parker, South Dakota physician.

A. J. Smith, M.D., Yankton, passed away on

December 10, 1953 of a heart attack.

Finn Koren, M.D., former Watertown and Black Hills physician, passed away in Canada on January 31, 1954 at the age of 80.

John B. Gregg, Sr., M.D., EENT specialist in

Sioux Falls, passed away on March 3rd, 1954. Death was due to a heart attack.

L. F. Beall, M.D., Irene, passed away on April 13, 1954.

R. S. Westaby, M.D., Chr. G. Lindeman, M.D. C. A. Clark, M.D.

The Reference Committee moved the adoption of this report. Carried.

> REPORT OF THE COMMITTEE ON PUBLIC HEALTH

The Committee on Public Health is broken down into sub committees on Cancer, Maternal and Child Walfare, Tuberculosis. Each of these subcommittees submits its own report. It is the policy

of the State Department of Health to use the Council of the Association in an advisory capacity. Any new public health program or any program revision which is related in any manner to the practice of medicine is first cleared with the Council of the co cil. During the past year Council approval was given to a study of maternal mortality to be made by the South Dakota Society of Obstetrics and Gynecology with data to be supplied by the State Health Department. A comprehensive financial report was also furnished by the Health Department to the Council for its use in the consideration of federal-state matching programs in public health.

The Reference Committee was unable to draw any con-

clusion from this report. Moved the adoption as written.

Carried.

G. J. Van Heuvelen, M.D.

REPORT OF THE SUBCOMMITTEE ON CANCER

The following members of the South Dakota Medical Association serve on the Board of the South Dakota Division of American Cancer Society: D. H. Breit, M.D., W. A. Dawley, M.D., Hans Jacoby, M.D., William Duncan, M.D., G. F. Mc-Intosh, M.D., and P. V. McCarthy, M.D. The Society conducts an active program throughout the State in cancer education supports cancer research State in cancer education, supports cancer research with appropriated funds to the State University and distributes in a limited manner funds to individual cancer patients.

P. V. McCarthy, M.D., Chr.
W. A. Geib, M.D.
J. T. Murphy, M.D.

The Reference Committee moved the adoption of this report. Carried.

REPORT OF SUBCOMMITTEE ON TUBERCULOSIS

The Attorney General's office has recently ruled that it is not permissable for a tuberculosis institution to restrain uncooperative patients, even though they are a public health menace, under lock and key. We would like to recommend that the South Dakota State Medical Association go on record as favoring the passage of legislation that would enable tuberculosis institutions to restrain incalcitrant individuals.

The Indian situation is becoming increasingly severe. In 1953 the Indian population accounted for over one-half of the deaths from pulmonary tuber-culosis. The facilities at the Sioux Sanatorium are inadequate to care for the Indian population.
The Attorney General's office has recently ruled that the Sanatorium and Soldier's Home Board does not have the authority to enter into contract with the Indian Service for the care of the overflow of the Sioux Sanatorium. We would like to recommend that the South Dakota Medical Association go on record as favoring the passage of legislation that would enable such a contract to be drawn up.

As you know all the Sanatorium patients have been moved into the new hospital unit at Sanator. This permits care of the patients much more satisfactory. At the present time the hospital unit is adequate to care for all of the patients.

At the present time the death rate from tuberculosis is approximately eleven per one hundred thousand. This is still much too high however, it is definitely lower than the majority of the state. With our present patient population our per diem cost is approximately \$7.00 per day. At the time of the Griffenhagen report our patient population was down very materially with the result that the per diem cost was \$9.24. With increased patient population the per diem cost is much more favorable. We have recently sent a questionize to able. We have recently sent a questionaire to a number of tuberculosis sanatoria in the northern tier of states. We have had replies from fourteen of these institutions. The average per diem cost is \$9.88 per day. In view of our low death rate

and per diem cost slightly below the average, it is our impression that the services furnished by the Sanatorium are reasonable.

W. L. Meyer, M.D., Chr. J. P. Steele, M.D. J. M. Butler, M.D.

The Reference Committee moved the adoption of this report. Carried.

REPORT OF THE SUBCOMMITTEE ON MATERNAL & CHILD WELFARE No meetings held and therefore no report.

REPORT OF THE COMMITTEE ON DIABETES

I am submitting, such as it is, a report on the Diabetes Committee of the South Dakota Medical Association. I hesitate to report that cooperation this year was not as good as past years during Diabetes Detection Week. The larger cities such as Yankton, Sioux Falls and Rapid City had a good program set-up whereby several thousand urines were tested. We had no other program in force during the year. There were no committee meetings.

J. W. Donahoe, M.D., Chr. B. S. Clark, M.D. T. H. Sattler, M.D.

The Reference Committee moved the adoption of this report. Carried.

REPORT OF THE EXECUTIVE COMMITTEE

The Executive Committee had only one official meeting during the year. However, the members of the Committee conferred with each other by letter and telephone as to various matters of interest to the Association that came up.

A. W. Spiry, M.D.
G. I. W. Cottam, M.D.
F. D. Gillis, Sr., M.D.
A. P. Peeke, M.D.
R. E. VanDemark, M.D.

The Reference Committee moved the adoption of this report. Carried.

REPORT OF THE GRIEVANCE COMMITTEE

Complaints, grievances or incidents for "mediation" filed with this committee for the year 1953-54 have been very few. None have required a meeting of the committee. This does not mean that the committee has been entirely inactive, for there has been some correspondence between the Chairman and the members, but that there has been no single item that has required an executive session of the committee.

It has been suggested that the name of this committee be changed to "The Mediation Committee." A majority of the committee agrees with this recommendation. It is therefore recommended that the necessary approval be given this report to accomplish this change.

L. J. Pankow, M.D., Chr. T. F. Riggs, M.D. D. S. Baughman, M.D. J. L. Calene, M.D. R. E. Jernstrom, M.D.

The Reference Committee moved the adoption of this report. Carried.

> REPORT OF THE COMMITTEE ON MENTAL HEALTH

The members of the Committee and the members of the society have sponsored the activities of the State Association for Mental Health and have supported the campaign of the National Association for Mental Health.

As chairman of the committee, I have seen the need for more training for the practitioner, continued support of the Guidance Clinic Facilities, continued improvement of our state laws and institutions for the care of the mentally ill, and education of the public as to the values of the mental hygiene movement at the State and National levels.

All of the above aims can be promoted by more use of the Speakers Bureau sponsored by the S. D. Mental Health Association both for professional, auxiliary and lay meetings. I especially suggest the inclusion in local and county medical meetings of a regular program for the study of problems

concerning the mentally ill.

H. E. Davidson, M.D., Chr.
E. S. Watson, M.D.
R. C. Knowles, M.D.

The Reference Committee moved the adoption of this report. Carried.

REPORT OF THE COMMITTEE ON THE BENEVOLENT FUND

The Benevolent Fund as originally determined was to be established to be used for distressed physicians and their families. At that time there was every evidence that such a fund, when it reached proper proportion, would become very necessary. As time elapsed while this fund has grown, good times have likewise come, and it's therefore decided to make use of this fund in loans to needy Medical Students.

The Fund is now in the control of the office of the Executive Secretary and at the present time amounts of cash on deposit at \$3,383.59 and bonds in the amount of \$2,292.87, making a total of \$5,-

The Committee recommends further that all in excess of \$1,000.00 on deposit be put in Government Bonds.

W. E. Donahoe, M.D., Chr. J. C. Hagin, M.D. F. C. Totten, M.D.

The Reference Committee moved the adoption of this report as amended and printed above. Carried.

REPORT OF THE COMMITTEE
ON RHEUMATIC FEVER & HEART DISEASE
As Chairman of the Committee on Rheumatic

Fever and Heart Disease, I wish to state that I have no report to make at this time.

However, as President of the South Dakota State Heart Association, I wish to state that we have now secured an Executive Secretary, full time, who is making a point of distributing literature of the state of the s ture on rheumatc fever and heart disease to all the superintendents of schools, and teachers in the grade schools and high schools throughout our state.

The doctors in the various towns in our state are now also going out and giving talks on rheumatic fever and heart disease to various organizations

such as PTA's, service clubs, and other assemblies.
D. L. Kegaries, M.D., Chr.
J. W. Argabrite, M.D.
D. C. Austin, M.D.

The Reference Committee moved the adoption of this report. Carried.

REPORT OF THE COMMITTEE ON RADIO BROADCASTS

The following medical topics were presented over the various radio stations in South Dakota this year: POLIO - TUBERCULOSIS - CRIPPLED CHILDREN - CANCER - HEART - MULTIPLE SCLEROSIS.

There also was a weekly series entitled "Fight for Life" that ran from September through May. Stations airing these programs were as follows: Aberdeen - Sioux Falls - Yankton - Rapid City -Watertown - Huron. J. C. Rodine, M.D., Chr.

Paul Reagan, M.D. J. H. Crawford, M.D. L. C. Askwig, M.D. R. A. Buchanan, M.D. F. D. Gillis, Jr., M.D. J. P. Steele, M.D. G. S. Owen, M.D.

The Reference Committee moved the adoption of this report. Carried.

REPORT OF COMMITTEE ON AMERICAN MEDICAL EDUCATION FOUNDATION

The AMEF during 1953 chalked up some additional 'firsts' in the effort to raise funds for our country's medical schools. The foundation, working through its 53 state and metropolitan committees, recorded a gross return of \$1,090,771.13 from 17,809 individual physicians, organizations and laymen. For the first time since the organization of AMEF, its annual income passed the million dollar mark. It is believed that this good result in 1953 will have a marked beneficial effect on future foundation returns, since it evidences growing acceptance among the medical profession. Also worthy of note and indicative of future success is the continuing growth of contributors, which increased 149% over 1952 (17,809 compared with 7,259, in 1952).

Our efforts in South Dakota during 1953 were productive of results comparable with those of 1952. In 1952 we received \$6,280.00 from 137 contributors, in 1953 \$6,500.00 from 133 contributors. 25% of our doctors gave support to the AMEF each year and we ranked fourth or fifth in the nation in percentage of physicians contributing. It is not commendable for us to show no increase in the actual number of contributors, however, we may be justly proud of the total percentage participa-

tion.

The University of South Dakota Medical School received \$13,803.11 from the overall campaign in 1953. This sum includes all monies earmarked for the school plus the schools share of the general fund donated. These funds have permitted activities which would not have been possible otherwise and have materially aided the maintenance of high standards of education.

It is the hope of your AMEF committee that more and more physicians will become aware of the AMEF and aid the accomplishment of its pur-

pose.

A. A. Lampert, M.D., Chr. H. Russell Brown, M.D. Faris Pfister, M.D. O. J. Mabee, M.D. A. P. Reding, M.D.

The Reference Committee moved the adoption of this report. Carried.

REPORT OF THE EDITORIAL COMMITTEE
While we had an increase in the number of pages
of printed material in the "South Dakota Journal
of Medicine and Pharmacy" this year over the previous year, we still do not receive enough scientific articles and case reports written by South Dakota physicians. Many members have been contacted by members of the Editorial Committee at various times and while promises and assurances have been given, the articles have not been forthcoming in most instances. News items, comments, and editorials are always welcome. Our Journal would be much more interesting if physicians in the state would participate more actively by submitting articles and reports of cases which would be of interest to the profession in South Dakota.

The Editor, Assistant Editor, and Business Manager, attended the Biennial Conference of Managers and Editors of State Medical Journals at A.M.A. headquarters in Chicago on November 9 and 10. The Conference brought up many suggestions for improving State Medical Journals. The Editor also attended the Annual Meeting of the American Medical Writer's Association at Springfield, Illinois, on September 23 and was one of twenty members throughout the nation who received a Fellowship Award. The Editor has been a member of the Advisory Committe of this organ-

a member of the Advisory Communication for several years.

R. G. Mayer, M.D., Chr.
D. H. Manning, M.D.
G. J. VanHeuvelen, M.D.
H. R. Wold, M.D.
H. J. Hare, M.D. Mary Price, M.D. Dagfin Lie, M.D. Amos Michael, M.D. T. W. Reul, M.D.

The Reference Committee moved the adoption of this report. Carried.

REPORT OF THE COMMITTEE ON MEDICAL LICENSURE

The Board of Medical and Osteopathic Examiners held mid-year examinations at the Game Lodge in the Black Hills on June 17th and 18th, 1953, and the January 1954 examinations were held in Sioux

Falls on January 19th and 20th.
Sixteen physicians were examined and fifteen of these passed the examinations. Of these sixteen five were displaced physicians and were awarded limited license to practice in South Dakota and will be given a fully unlimited license in the completion of four years of practice in the site designated for limited practice.

There were twenty-five physicians licensed by

reciprocity.

The annual registration fee has been instituted and nearly all doctors in the state and many of those who are licensed here but practicing else-

where have also paid the fee

The Board is currently attempting to get action instituted to prosecute illicit practitioners of the Healing Arts in the State of South Dakota. It is recommended that the House of Delegates take positive action to implement these actions.

Faris Pfister, M.D., Chr. Magni Davidson, M.D. C. E. Kemper, M.D.

The Reference Committee recommends that each District Society name a committee which would make up a list of illicit practitioners in that District and report them to the State Secretary and cooperate with him in their prosecution. The Committee moves the adoption of this amended report.

The Reference Committee moved the adoption of this report as amended. Carried.

REPORT OF THE COMMITTEE ON VETERANS ADMINISTRATION & MILITARY AFFAIRS

The Committee met twice . . . once early in the year to discuss VA medical care and again in April to form a joint committee with the American Legion to discuss hospitalization of non-service connected veterans. At that time it was decided that the Legion Committee should conduct a survey as to the cost of the counties if non-service connected indigent cases were returned to the county rather than cared for in VA facilities and the Medical Association should conduct a survey among the doctors to get their opinions on prob-lems of hospitalization of veterans.

The Committee recommends that the Association endorse the stand taken by the American Medical Association on non-service connected veterans who have ability to pay for services or who have insurance and recommends that further study be carried on in the matter of indigent veterans who are non-service connected. Particularly where the counties in which they reside are not giving adequate care to the indigent under their jurisdiction.

L. C. Askwig, M.D., Chr.

M. R. Gelber, M.D. D. H. Manning, M.D. F. F. Pfister, M.D.

The Reference Committee moved the adoption of this report. Carried.

REPORT OF COMMITTEE ON SPAFFORD MEMORIAL FUND

The recipient of the prize this year is John Wicks of Sioux Falls. Mr. Wicks is a freshman government major, debate and speech and is a good student scholastically. The award is \$25.00.

T. E. Eyres, M.D.

The Reference Committee moved the adoption of this report. Carried.

REPORT OF COMMITTEE
ON PREPAYMENT & INSURANCE PLANS
The Committee met twice during the year.
Action was taken to approve the policies of the North American Life and Casualty Company and the Central States Accident and Health Associa-tion. A request for approval of the Pioneer Mutual Life Insurance Company was tabled.

The Committee recommends that positive steps be taken in establishing a general policy towards

health insurance as follows:

 Deductible Features — \$25.00 or \$50.00 on medical or hospital payments to avoid small claims and permit reduction of premiums.

2. Co-Insurance — the insured shares percentage wise in medical and hospital costs and in this way exploitation of benefits is avoided (perhaps one-fourth of the cost to be paid by the

3. Catastrophe insurance — variable deductible (probably \$100.00 to \$500.00) with co-insurance up to \$10,000.00 benefits.

4. All plans should be made available to people over sixty-five years of age at a slightly higher premium rate . . . probably best on the co-insurance and catastrophe basis.

5. All plans must separate hospital benefits from

medical benefits.

C. J. McDonald, M.D., Chr. D. H. Breit, M.D. T. W. Reul, M.D. E. A. Johnson, M.D. Roscoe Dean, M.D.

A. A. Lampert, M.D.

The Reference Committee moved the adoption of this report. Carried.

REPORT OF COMMITTEE ON NATIONAL LEGISLATION

number of bills affecting the health of the public and the medical profession are now under consideration by Congress. The American Medical Association recently urged the Senate Finance Committee to act favorably on legislation to ease the financial burden of families with unusual medical care expenses, by liberalizing tax reductions for medical expenses. Under the present law only medical expenses in excess of 5 per cent of taxable income may be deducted. The bill (H.R. 8300) would reduce this to 3 per cent.

The American Medical Association also favors the inclusion of health insurance premiums as part consideration by Congress. The American Medical

the inclusion of health insurance premiums as part of medical expenses for tax purposes. This would serve as an inducement for more families to join

voluntary medical and hospitalization plans.

The A.M.A. and the Association of American Physicians and Surgeons and the insurance industry oppose the bill H.R. 8356 setting up re-insurance of voluntary health plans, because it would weaken the voluntary health insurance plans by encouraging actuarily unsound insurance practices and thus make them a vehicle for complete socialization of medical care. This bill would also place extensive regulatory power in the Federal Executive Department, particularly the Secretary of the Department of Health, Education and Welfare.

Your Committee on National Legislation en-

dorses the stand of the American Medical Association on the above mentioned bills and also favors the Keogh-Jenkins bills allowing physicians to set aside retirement funds which are exempt from current taxes.

The Committee also opposes the extension of social security benefits to cover physicians by com-The old social security law provides "insurance" against old age and survivors' needs, but takes away the benefits if, by chance or necessity the aging person continues working and earns as much as \$75.00 per month. This is unjust and unfair, since the members of the medical profession (and many others) your coldent retire at 20.65 (and many others) very seldom retire at age 65.

The Committee approves of the objective of the Bricker Amendment, which is to eliminate su-premacy of "Treaty Law in the United States" by requiring the Congress to implement, with legislation, all treaty agreements negotiated between the

United States and other countries.

At present treaties become the supreme law of the land if ratified by two-thirds of the Senate present and voting. If treaties with Denmark, Holland, Israel, and Greece had been ratified as originally prepared, this past year, some of the requirements of the State Medical Licensing Boards would have been abrogated. Because of the danger of the socialization of medicine by international treaty, the American Medical Association favors redefinition of existing treaty-making powers. The exact wording of a suitable amendment is a matter for constitutional lawyers to determine. But we should endorse the principles embodied in Senate Resolution No. 1.

The Committee feels that every physician should present the medical profession's viewpoint on all of these important legislative proposals to our Con-

gressmen and Senators whenever possible.
R. G. Mayer, M.D., Chr.
A. W. Spiry, M.D.
F. D. Gillis, Sr., M.D.
H. Russell Brown, M.D.

The Reference Committee moved the adoption of this report. Carried.

REPORT OF THE COMMITTEE ON RURAL MEDICAL SERVICE

The notable highlights of this year's efforts in rural health in the State of South Dakota are as

We were first vsited by Aubrey D. Gates, Field Director of the Council on Rural Health of the AMA. He paid us a visit on the 7th of May and we took him around this part of the state showing him what was being done in the way of rural health. We took him to Lake Preston and showed him their hospital. They had built this by them-selves, without federal aid, and had equipped this hospital and had been running it without a deficit. Mr. Gates was very much impressed and wished that this would be written up. John Foster, our executive secretary, gathered the information and the pictures and wrote the article. This was published in the **Dakota Farmer** on October 3, 1953. If you have not read the article, it is well worth reading. It shows what a community of South Dakotans can do, and have done, about solving their doctor and hospital situation.

We also felt that we ought to bring the survey of health facilities in South Dakota up to date. This was done and published in December 1953. It was titled "1954 Today's Health Today." The facts therein published certainly show a trend of more doctors, expecially in the rural areas. The age of doctors now averages a little lower than they were during the past eight years.

I might say a word about the preceptorship at the University. I think that this is working out very well. We have felt the effect of these young men coming back to South Dakota.

The American Medical Association requested that Gordon Maxam of Lake Preston be put on the

program of the National Rural Health Conference to tell about the Lake Preston Hospital. Mr. Maxam made a very fine presentation. He told the story of how this thing came into being and how they solved their various problems. After his talk there was a very lively discussion. When asked if there was any federal help, he was able to tell them that there was not. After his statement, there was a great applause. I am sure that there are a number of areas in South Dakota that have done the same. These people are solving their own problems. I hope that the state will avail themselves of the State Medical Organization and Rural Health Organization to study and solve some of the rural health problems. I am sure that we can do it much better than aid from the federal governments or elsewhere.

The Ninth National Conference on Rural Health was held at the Baker Hotel in Dallas Texas from March 4-6. I attended this meeting and it is interesting to note that in these nine years a tremendous change has taken place in regard to life in the country, rural practices in the country, and facilities for rural practices in the country. Many factors go into making life in the country better medically speaking and economically speaking. They have better roads, electricity, better farm practices and better nutrition.

I certainly do want to thank the South Dakota State Medical Association for this opportunity of being chairman of the Rural Health Committee of South Dakota.

A. P. Peeke, M.D., Chr. M. M. Morrissey, M.D. G. J. Bloemendaal, M.D.

The Reference Committee moved the adoption of this report. Carried.

REPORT OF COMMITTEE ON NURSING TRAINING

The first meeting was July, 1953 in Sioux Falls, called by the South Dakota Nurses Association, with interested persons to discuss degree nursing. S.D.U., South Dakota State, Dakota Wesleyan, Augustana, South Dakota Hospital Association, Nurses Association, and the South Dakota Medical Association representatives attended. A questionaire was decided upon and mailed out to make a survey as to the needs and desires of those employing nurses — a degree nurse or diploma nurse.

As a result of this, there has been set up one

degree nurse program hospital in Sioux Falls for the entire state. The others will still maintain their theree year diploma schools. Of course, the idea of the degree nursing course is to train executives, supervisors and instructors, rather than spec-

ial duty, office or general duty nurses.

As the need is indicated, undoubtedly another

school may be added if necessary requirements in

the training hospital can be met.

W. H. Saxton, M.D., Chr.

E. C. Bobb, M.D.

H. J. Grau, M.D.

The Reference Committee feels that there is no great need for degree nursing in South Dakota and that the one school now in existance in Sioux Falls is more than suf ficient. It feels that more three-year diploma nurses should be trained. The Committee moves the adoption of this amended report.

The Reference Committee moved the adoption of this report as amended and written above. Carried.

REPORT OF COMMITTEE ON WORKMEN'S COMPENSATION

The Committee has made the following recom-

mendations:

1. That the weekly allowance given disabled workmen be increased sufficiently to pay the living expenses of the average family. At present they receive only \$28.00 a week which is not sufficient to pay the operating expenses of any family in this area. We recommend this be increased to \$40.00 for men supporting a family and who have no other means of support

support.
2. The following amendment to the Workmen's Component Law is recommended: "The Compensation Law is recommended: "The Commissioner may, upon application and upon reasonable proof being furnished of the necessity thereof, allow additional surgical and hospital services and supplies but not to exceed the cost of \$1,000.00 in addition to the amounts herein before allowed."

Robert E. VanDemark, M.D., Chr.
J. N. Hamm, M.D.

Robert Delaney, M.D.

Robert Delaney, M.D.

The Reference Committee moved the adoption of this report. Carried.

REPORT OF LIASON COMMITTEE WITH S.B.H.

The Liason Committee with the State Depart-

The Liason Committee with the State Department of Health met at Huron, South Dakota on January 30, 1954. Those present were Drs. Mayer, Wessman, Vogele, VanHeuvelen and Geib, and executive secretary Foster.

Consideration was given to a letter from the South Dakota Public Health Association, which was referred to this Committee by the House of Delegates in June 1953. The letter asked for a statement concerning the functions of public health statement concerning the functions of public health nurses. It is recommended by the Committee that the functions of public health nurses should be determined by the local medical societies. It was noted that there are no difficulties between Public Health Nurses and the medical profession in South Dakota. A request for a statement concerning instruction in pre- and post-natal care was considered as not being a problem at present, because nurses currently engaged in Public Health work have so many other duties that they are unable to furnish pre- and post-natal instruction.

The evaluation program of hospital and clinic laboratories certified to perform prenatal and premarital tests for syphilis was discussed. It was noted that the Division of Laboratories is presently sending out numbered blood specimens to labora-tories, with a separate report of the results to the Director of the Laboratory. This permits the technicians to perform the tests as unknowns and for the Director of the individual laboratory to eval-uate his technicians' work. The Division of Laboratories is to be commended for the development of this method for evaluation of laboratories as a step forward in providing accurate and reliable sereological tests for syphilis in South Dakota.

W. A. Geib, M.D., Chr.

N. E. Wessman, M.D.

C. L. Vogele, M.D.

The Reference Committee moved the adoption of this report. Carried.

REPORT OF THE COMMITTEE ON INTERPROFESSIONAL RELATIONS

The Committee has met once during the year after a period of study on the problems presented to it by the House of Delegates. The following recommendations are presented by the Committee.

1. Because osteopathy, despite its acceptance of nearly all of medicine's concepts, has not meaning after the cast off its cultist hegippings.

an effort to cast off its cultist beginnings, it should be considered a "cult." The study of the catalogues of the Colleges of Osteopathy reveals that they still adhere to many of their original principles. Following quotation from the catalogue of the Kirksville College of Osteopathy and Surgery, Kirksville, Missouri, 1954, reads as follows: "Manipulative methods as originated by Dr. Still, and later developed by other osteopathic physicians are designed to correct structural mal-adjustments and malfunctions which are disturbing factors in regional blood and nerve supply predisposing to functional and organic disease. Manipulation has always been, and still is, a distinctive feature of osteopathic practice."

2. It is felt that in the public interest, doctors of medicine should be permitted to teach in osteopathic schools provided these schools meet other collegiate teaching standards. At the present, no desire to improve medical teaching by adding M.D. staff has been evidenced by the schools of osteopathy, so it is felt that offerts in this direction should be felt that efforts in this direction should be initiated by that group.

3. It is felt that relationships between doctors of medicine and doctors of osteopathy should be determined at the local or state level. Because state laws on medicine and osteopathy differ, it is felt that the State Medical Associations are best equipped to cope with the prob-

Robert E. VanDemark, M.D., Chr. P. V. McCarthy, M.D. H. Russell Brown, M.D.

The Reference Committee moved the adoption of this report. Carried.

REPORT OF THE COMMITTEE ON THE STUDY

OF IMPROVEMENT OF PATIENT CARE
Of late great emphasis has been placed on the improvement of patient care and rightfully so the State Nurses Association and the State Hospital Association have taken the lead — several meetings have taken place. Below is the list of the topics suggested for discussion. Most of them are too long to go into detail, but it will give the Doctors of the State an idea as to what is being discussion with the interest of the state and idea as to what is being discussed with the interest of the state and idea is to what is being discussed in the state and idea is to what is being discussed in the state and idea is to what is being discussed in the state and idea is to what is being discussed in the state and idea is to what is being discussed in the state and idea is the state an cussed, with the idea in mind of improving patient

The first meeting was in November of 1953, with a joint committee of nurses, doctors, hospitals and Public Health officials present. Some thirteen ques-

tions were discussed:

1) How to improve in-service? It was decided that the Director of Nursing service and the Director of the School of Nursing be responsible. The Administrator in small hospitals.

2) Inter-personnel relationship — as to orientation and training of new help — delegating of responsibility — team spirit — leadership development.

3) It is the responsibility of the nurse to pro-

nounce a patient dead.

Difficulty of hospitals to get a provisional diagnosis.

5) Team concept.

a) A professional and non-professional group

- organized to give better patient care.
 b) Lighten work of trained help and assist the auxiliary help to find her place in nursing. Keep fill gap between supply and demand.
- c) What is a team? A graduate senior student, younger students, licensed practical nurse, aides.
- d) Head nurse to teach, organize and supervise.

- 6) Visiting hour problem.7) Early Ambulation presents change in service care and entertainment.
- Selective menu advantages and disad-

Rural affiliation of student nurses.

10) Refusal of some staff members in A.C.S. Hospitals to submit tissues.

11) Legislative problems.
12) Personnel policies.
13) What is a general hospital — care of mental and psychiatric cases, contagious cases, etc.
The average hospital in South Dakota is not equipped to give special services as above.

Again a meeting was held in Brookings March 30 and April 1, at which the Associate Director for National League for Nursing was one of the principle speakers. She mainly stressed the need for an increase in nurses aides and practical nurses to augment the graduate nurse — in many places the former out-number the latter 9 to 5. That aides and practical nurses are the answer to better nursing care and the teaching of them is the problem of the administration. Many good books and pamphlets are available to do this with. It is to be recommended however, that qualified supervisors and instructors be present at all times.

At present South Dakota has one school for prac-

tical nurses that has been very satisfactory and effective. And it is understood that surely one and possibly two more will be established in the near

This report is submitted for your serious consideration, as a possible solution to the problem of nursing care of the sick — in which we as Doctors

nursing care of the sick — in which we as are so vitally concerned.

W. H. Saxton, M.D., Chr. E. C. Bobb, M.D.
H. J. Grau, M.D.
J. V. McGreevy, M.D.
R. F. Livingston, M.D.
J. A. Eckrich, M.D.

The Reference Committee moved the adoption of this

report. Carried.

REPORTS OF THE REFERENCE COMMITTEES

CREDENTIALS COMMITTEE

A quorum was present for the meeting of the

House of Delegates and the credentials of those in attendance were in order. Total registration for the convention was 346, including 197 M.D.'s 53 exhibitors, 75 auxiliary members and 21 guests.

M. M. Morrissey, M.D., Chr. R. J. Delaney, M.D. R. F. Livingston, M.D.

REPORT OF THE REFERENCE COMMITTEE ON_OFFICERS AND COUNCILLORS

I. The Report of the President was read and this committee commends the President for the active leadership he has exerted on behalf of the medical profession of South Dakota.

II. The Report of the President-Elect was read

and approved.
III. The Report of the Vice-President was read

and approved.

IV. The Report of the Secretary-Treasurer was

read and approved.

V. The Treasurer's Report for May 1, 1953 to April 30, 1954 which had been audited by a CPA

was read and approved.

VI. The Report of the Executive Secretary presents a brief summary of the Medical Societies activities in its fields of Placement, Publications, Liason with Allied Groups, Home Town Medical Care, Legislation, Selective Service, Information, Board of Medical Examiners, Public Relations and Miscellaneous, and in addition a listing of meeting and public appearances made by the Executive Secretary. The Committee approves this report.

VII. Report of the Delegate to the AMA was read and the Committee expresses deep satisfaction with the vigorous representation that South Dakota has with the Delegate and Alternate Delegate to the AMA. The Committee approves the Report of the

Annual Meeting of the Interim meeting.

VIII. The Report of the Alternate Delegate to the AMA was read and approved.

IX. The Report of the Council was read and approved.

proved.
X. The Reports of Councillors from the I-IX

Districts inclusive were read and approved.

XI. The Budget for the year 1954-55 was read.

It was noted that the proposed budget was essentially similar to the 1953-54 budget and your committee approves the budget.

XII. The Proposed Bill defining and regulating the practice of physiotherapy was read and ap-

proved.

XIII. The Report of the South Dakota State Medical Association, the Legislative Research Council, regarding the Griffenhagen and Associates study of the care of the senile was read. Recommendation #9 — your committee recommends be changed to read, "We recommend further study of providing care for tuberculous patients at Yankton State Hospital and at Sanator. In view of the increasing trend of medical practice toward active surgical intervention in the therapy of the tuber-culosis patient we recommend that facilities be provided for such surgical treatment at Sanator or elsewhere." Your Committee approved the report as amended.

XIV. The recommendation of the Medical Economics Committee regarding uniform insurance forms was discussed and your committee believes that efforts be continued to obtain uniform insur-

ance forms in South Dakota.

XV. The Roommendations that the Group Life Insurance Plan make continuing efforts for the next two months to obtain new members, and that the present plan be dropped at the end of two months and another plan be explored was discussed and approved.

Wayne A. Geib, M.D., Chr. P. V. McCarthy, M.D. F. C. Kohlmeyer, M.D.

REPORT OF REFERENCE COMMITTEE ON RESOLUTIONS AND MEMORIALS

WHEREAS, the Huron District Medical Society doctors have made such careful and detailed ar-

rangements which have added to the pleasantness and success of the 73rd Annual Meeting of the South Dakota State Medical Association,

BE IT RESOLVED, that the South Dakota State Medical Association extend its thanks and due appreciation to the local doctors of Huron who have seen to it that the facilities of Huron who have seen to it that the facilities of Huron were at

our disposal.

WHEREAS the management of the Marvin Hughitt Hotel the Tams Hotel and the Motel Association have been most cooperative and courteous in providing facilities and working arrangements for the success of the 73rd Annual Meeting of the

South Dakota State Medical Association,
BE IT RESOLVED, that the South Dakota
State Medical Association extend its thanks and appreciation to the Marvin Hughitt Hotel, the Tams Hotel and the Motel Association.

WHEREAS, the Country Club in providing facilities for the stag party has contributed much to the success of the meeting,

BE IT RESOLVED, that the South Dakota

State Medical Association extend its thanks to the

WHEREAS, the Huron Chamber of Commerce and the Mayor of Huron have been most cooperative in making arrangements for the success of the 73rd Annual Meeting of the South Dakota State

Medical Association,
BE IT RESOLVED, that the South Dakota
State Medical Association extend its thanks to the Mayor of Huron and the Huron Chamber of Commerce and to all others who assisted in the prep-

aration for the meeting.

WHEREAS, the Daily Plainsman and Radio Station KIJV have been most cooperative in presenting the public news of the 73rd Annual Meeting of the South Dakota State Medical Association,

BE IT RESOLVED, that the South Dakota State Medical Association extend its sincere thanks to the Daily Plainsman and Radio Station KIJV.

WHEREAS, the druggists of Huron have been most cooperative and have contributed much towards the success of the 73rd Annual Meeting of the South Dakota State Medical Association,

BE IT RESOLVED, that the South Dakota State Medical Association extend its thanks to the druggists of Huron.

It is recommended that the House of Delegates adopt a resolution to appoint a committee to study the present coroner system and draw up a bill to be presented to the next session of the legislature.

The Committee recommends that no further action be taken on the Mundt Chiropractic and in view of Senator Mundt's letter in reply.

R. A. Buchanan, M.D., Chr. M. B. Lyso, M.D. H. J. Grau, M.D.

REPORT OF THE REFERENCE COMMITTEE ON AMENDMENTS TO THE CONSTITUTION AND BY-LAWS

Chapter 7—Section 1

Strike out "Grievance Committee" and replace it with "Mediation Committee"

Chapter 7—Section 14

Strike out "Grievance Committee" and insert in its place "Mediation Committee"

Chapter 1

Change Section 9 to Section 10. Add Section 9 as follows: "At some meeting in advance of the Annual Session of this Association each component district society shall select a list of three (3) members to be submitted to the Nominating Committee of the House of Delegates of this Association as its recommendations for the office of councillor from that district society. This shall be done in years when a councillor is to be elected from that district society. The secretary of the component district society shall submit these three (3) names to the secretary-treasurer of this Association at least thirty (30) days before the Annual Session. Chapter 4

Change Section 2 to Section 3 and Section 3 to Section 4. Add Section 2 as follows: "Whenever a councillor's term expires the Nominating Committee shall select at least one (1) nominee for the office of councillor from each district from the list of three (3) submitted by each component district

society.

C. R. Stoltz, M.D. F. D. Gillis, Sr., M.D. B. R. Skogmo, M.D.

REPORT OF REFERENCE COMMITTEE NO. 4, WHICH IS THE REFERENCE COMMITTEE ON

STANDING COMMITTEES

A. A. Lampert, M.D., Chairman
G. A. Stevens, M.D.

I. REPORT OF THE COMMITTEE
ON SCIENTIFIC WORK

Your Reference Committee has reviewed this port. We wish to commend the Committee for report. its 1954 Annual Session program. We wish further to express interest in the work being done to institute a program for South Dakota Post-Graduate Education and feel that the next year

should see definite institution of that program.
II. REPORT OF THE COMMITTEE
ON PUBLIC POLICY AND LEGISLATION

Your Reference Committee has reviewed this rethat all controversial bills which might be presented at the next Legislative Session be submitted for the consideration of this Committee prior to the September 1954 Council Meeting. Adequate consideration of bills by the Council on Adequate consideration of bills appropriate of the control of the control of the council on the control of the council on the control of the contro short notice is impossible. The cooperation of the various Districts throughout the State, will be appreciated.

III. REPORT OF THE COMMITTEE ON PUBLICATIONS

Your Reference Committee has reviewed this report and wishes to express approval. The entire Association owes a great debt of gratitude to this Committee, to Mrs. Weck and to Mr. Foster for efforts expended in making the South Dakota Journal of Medicine and Pharmacy known nationally. It might be mentioned here that during the last three months the Audio-Digest Corporation has reviewed three articles published by the South Dakota Journal.

IV. REPORT OF THE COMMITTEE ON MEDICAL DEFENSE

Your Reference Committee views the lack of activity of the Committee on Medical Defense with much misgiving. Malpractice lawsuits and malpractice insurance are subjects receiving intense study by national medical organizations. South Dakota physicians during the past year have been involved in several instances. Your reference committee believes that a statewide analysis of this problem and local recommendations would be ad-

vantageous to the organization as a whole.

V. REPORT OF THE COMMTTEE

ON MEDICAL SCHOOL AFFAIRS, MEDICAL

EDUCATION AND HOSPITALS

YOUR Defenses Committee has reviewed this

Your Reference Committee has reviewed this lengthy report and wishes to commend the Committee for its activities. Three basic items are covered by the report:

First, it was recommended that Medical School Endowment funds in excess of current needs for student loans be placed in Government bonds. agree with this concept.

Second, the Medical School Affairs Committee expresses an interest in post-graduate education and the thoughts of your Reference Committee on

that matter have been prevously expressed.

Third, the Medical School Affairs Committee recommendations as concern the portion of the Griffenhagen Report, with which they are concerned has been reviewed. Your reference committee is in agreement on the recommendations

made by the Medical School Affairs Committee.

VI. REPORT OF THE COMMITTEE

ON MEDICAL ECONOMICS

Your Reference Committee has reviewed this report. It is approved.

VII. REPORT OF THE COMMITTEE

ON NECROLOGY

Your Reference Committee has reviewed this report. It is accepted without question.

VII. REPORT OF THE COMMITTEE

ON PUBLIC HEALTH

Your Reference Committee has read the very

Your Reference Committee has read the very brief report of the Committee on Public Health and wishes to express the opinion that this report does not give the Association adequate material from which to form any opinion of the activities accomplished on a public health level. It must be assumed that the Advisory Committee to the Public Health Department is satisfied with public health activities within this state. Council control of the medical activities of Publc Health seems adequate. Again, your reference committee feels it is unable to draw firm conclusions concerning this activity.
IX. REPORT OF THE SUBCOMMITTEE
ON CANCER

Your Reference Committee has read this report and wishes to accept the report as a whole.

X. REPORT OF THE SUBCOMMITTEE

ON TUBERCULOSIS

Your Reference Committee has read this report.
We would accept this report and recommend only that legislation which would enable tuberculous institutions to restrain unwilling individuals, be fomulated and submitted to proper committee.

XI. REPORT OF THE SUBCOMMITTEE
ON MATERNAL AND CHILD WELFARE
Your Reference Committee notes that no meeting were held no report was submitted; con-

ing were held, no report was submitted; con-

sequently, no opinion can be offered.

XII. REPORT OF THE COMMITTEE

ON DIABETES

Your Reference Committee accepts this report

and would only make the comment that the success of such activities as Diabetes Detection Week depends entirely upon public education. We would recommend that considerable effort be spent to make such activities a success for the reason that it enhances the medical profession's public relation position.

XIII. REPORT OF THE EXECUTIVE COMMITTEE

Your Reference Committee notes that even though the Executive Committee report is very brief, the many problems on which decisions were mandatory have been settled to the benefit of the Association. We accept this report. XIV. REPORT OF THE GRIEVANCE

COMMITTEE

Your Reference Committee accepts this report. The suggested name change from "The Grievance Committee" to "The Mediation Committee" is a committee of this problem. thought advisable. Consideration of this problem by Reference Committee No. 7 has been noted and no suggestion is made at this time.

XV. REPORT OF THE COMMITTEE

ON MENTAL HEALTH

Your Reference Committee notes that the Committee on Mental Health has been active. We would accept their report and commend them for

their interest and activity.

XVI. REPORT OF THE COMMITTEE
ON THE BENEVOLENT FUND

Your Reference Committee notes with satisfacfour Reference Committee notes with satisfaction the gradual, steady growth of the Benevolent Fund. Although it has not been needed in these good times, it is thought that there will be occasions for the use of these monies. We accept the report of this Committee.

XVII. REPORT OF THE COMMITTEE

ON RHEUMATIC FEVER & HEART DISEASE Your Reference Committee accepts this Report and notes with interest that the South Dakota State Heart Association now has an Executive Secretary. It is felt that this addition of personnel will insure the proper functioning of this most important association.

REPORT OF REFERENCE COMMITTEE NO. 5 — SPECIAL COMMITTEES AND MISCELLANEOUS BUSINESS

C. J. McDonald, M.D., Chairman H. R. Wold, M.D. A. P. Reding, M.D. I. REPORT OF THE COMMITTEE ON RADIO BROADCASTS

The Reference Committee moves the adoption of this report.

II. REPORT OF THE COMMITTEE ON AMERICAN MEDICAL EDUCATION FOUNDATION

The Reference Committee moves the adoption of this report.

III. REPORT OF THE EDITORIAL COMMITTEE

The Reference Committee moves the adoption of this report, but recommends to the House of Delegates that every effort be made to secure more scientific articles and cases for publication.

> IV. REPORT OF THE COMMITTEE ON MEDICAL LICENSURE

The Reference Committee recommends that each District Society name a committee which would make up a list of illicit practitioners in that District and report them to the State Secretary and co-operate with him in their prosecution. The Committee moves the adoption of this amended report.

V. REPORT OF THE COMMITTEE ON VETERANS ADMINISTRATION AND MILITARY AFFAIRS

The Reference Committee moves the adoption of this report.

VI. REPORT OF THE COMMITTEE ON SPAFFORD MEMORIAL FUND

The Reference Committee moves the adoption of this report.

VII. REPORT OF THE COMMITTEE ON PREPAYMENT AND INSURANCE PLANS

The Reference Committee moves the adoption of this report.

VIII. REPORT OF THE COMMITTEE ON NATIONAL LEGISLATION

The Reference Committee moves the adoption of this report.

IX. REPORT OF THE COMMITTEE ON RURAL MEDICAL SERVICE

The Reference Committee moves the adoption of this report.

> X. REPORT OF THE COMMITTEE ON NURSING TRAINING

The Reference Committee feels that there is no great need for degree nursing in South Dakota and that the one school now in existence in Sioux Falls is more than sufficient. If feels that more three-year diploma nurses should be trained. The Committee moves the adoption of this amended report.

XI. REPORT OF THE COMMITTEE ON WORKMEN'S COMPENSATION

The Reference Committee moves the adoption of this report.

XII. REPORT OF LIASON COMMITTEE WITH S.B.H.

The Reference Committee moves the adoption of this report.

XIII. REPORT OF THE COMMITTEE ON INTERPROFESSIONAL RELATIONS

The Reference Committee moves the adoption of this report.

XIV. REPORT OF THE COMMITTEE ON THE STUDY OF IMPROVEMENT

OF PATIENT CARE
The Reference Committee moves the adoption of this report.

XV. REPORT OF THE COMMITTEE ON BLOOD BANKS

Since a report was not submitted, opinion cannot be offered.

XVI. RESOLUTION REGARDING RAISING THE STANDARDS OF THE HEALING ARTS
IN THE STATE OF SOUTH DAKOTA

The Reference Committee recommends striking in toto the last paragraph of the Resolution for the reason that some cultists may be able to produce evidence that the curricula of their schools would seem to meet these requirements. The Committee moves the adoption of this amended Resolution.

RESOLUTION REGARDING RAISING THE STANDARDS OF THE HEALING ARTS IN THE STATE OF SOUTH DAKOTA
WHEREAS, South Dakota State Medical Asso-

ciation is primarily interested in raising the

standards of the healing practce in the State, NOW,THEREFORE, be it resolved that the South Dakota State Medical Association take a positive stand regarding Legislation; that it not wait for cultists to introduce legislation which lowers the standards of practice; but that the Association in-troduce legislation which will raise the standards of practice of healing arts above the level at which cultists can qualify, and

BE IT FURTHER RESOLVED, That no practitioner of healing arts be admitted to the staff of any hospital supported by public funds who has not completed an internship approved by the

Joint Committee, and

BE IT FURTHER RESOLVED, That no pracfrom public funds who has not completed a course of study, equivalent to (here insert course of study of Class "A" Medical School). Introduced by Dr. Wold Referred to Committee No. 5

REPORT OF REFERENCE COMMITTEE NO. 6 NOMINATING COMMITTEE

A. P. Reding, M.D., Chairman M. R. Gelber, M.D.
C. R. Stoltz, M.D.
D. C. Austin, M.D.
L. C. Askwig, M.D.
G. E. Burman, M.D.
F. D. Gillis, Jr., M.D.
R. J. Ogborn, M.D.
J. N. Hamm, M.D.
R. H. Hayes, M.D.
A. W. Spiry, M.D.
F. F. Pfister, M.D.

The Nominating Committee presents in nomination the following slate for positions as officers of the Association:

President-Elect — Floyd Daniels Gills, Sr., M.D., Mitchell

Vice-President — A. P. Peeke, M.D., Volga

Speaker of the House - R. A. Buchanan, M.D., Huron

Delegate to the AMA — H. Russell Brown, M.D., Watertown

Alternate delegate to AMA - A. A. Lampert, M.D., Rapid City

Councillor Third District - Magni Davidson. M.D., Brookings

Councillor, Fifth District — B. T. Lenz, M.D., Huron

Councillor, Sixth District - B. R. Skogmo, M.D., Mitchell

Councillor, Seventh District — C. J. McDonald, M.D., Sioux Falls

The Nominating Committee recommends Mitchell as the place for the 1955 meeting, the dates to be left to the Executive Committee and the Executive Secretary.

South Dakota Medical Association Roster--1954 Membership by Districts

ABERDEEN DISTRICT No. 1 Pres., M. F. Williams, M.D. Sec., B. F. King, M.D.

Alway, J. D.	Aberdeen
Berbos, J. N.	Aberdeen
Berzins, R.	Bowdle
Disamended C I	Incurioh
Bloemendaal, G. J.	IDSWICH
*Brenckle, J. F.	Mellette
*Bruner, J. E	Aberdeen
Bunker, P. G.	Aberdeen
Calene, J. L.	Aberdeen
Cooley, F. H.	Aberdeen
Cornely, J. F.	Aberdeen
Currie, K. P.	
Damm, W. P	
Drissen, E. M.	
Echrich, J. A.	
*Elward, L. R.	
*Farrell, W. D.	
Gelber, M. R.	
CLUCI, III. II.	Tiberucell

Gorder, Wm.	Aberdeen
Graff, L. W.	
Hagan, A. S.	
*Jackson, E. B.	Aberdeen
*Keegan, Agnes	Aberdeen
King, B. F.	Aberdeen
King, Owen	Aberdeen
Martyn, W. E., M.M.	Aberdeen
Mayer, R. G	Aberdeen
Murdy, B. C	Aberdeen
Murdy, C. B	Aberdeen
Murdy, Robert C	Aberdeen
McCarthy, P. V.	Aberdeen
McIntosh, G. F.	Eureka
Nelson, L. A., M.M.	Faulkton
*Ohlmacher, J. C	Aberdeen

Perry, E. J	Redfield
Pittenger, E. A.	Aberdeen
Ranney, T. P.	Aberdeen
Rodine, J. C.	
Rosenberger H. P.	
Rudolph, E. A.	
Sanders, M. D.	
Scallin, P. R.	
Scheffel, A. R.	Redfield
Schuchardt, I. L.	
Steele, G., M.M.	_ Aberdeen
Strauss, B.	
Vogele, C. L.	
*Weishaar, C. E	
Williams, M. F.	
Zvejnicks, K.	
21 0,122 0, 221 0,122	

Allen, S. W. Watertown Argabrite, J. W. Watertown Auskaps, R. Lake Norden Bartron, G. R., M.M. Watertown Bartron, H. J., Jr. Clark Brakss, V. Castlewood Brown, H. R. Watertown Campbell, D. F. Watertown *Christianson, A. H. Clark Clark, C. J. Watertown

D	ISTR	CT N	To. 2	
Pres.,	Rodne	ey Sto	ltz, M.	D.
Sec.,	J. C.	Trive	tt, M.E).
awford	лн	.Tr	Water	to:

WATERTOWN

Crawford, J. H., Jr Watertown
Drobinsky, M Estelline
Fedt, Donald Watertown
Fershing, J. Bryant
*Hickman, G. L. Bryant
Janavs, V Willow Lake
Kilgard, R. M Watertown
Larsen, M. W. Watertown

Randall, O. S.	Watertown
Reul. T. W	Watertown
Rousseau, C.	Watertown
*Schieb, A. P	Watertown
Schmidt, M. A.	Watertown
Stoltz, C. R.	Watertown
Stransky, J. J.	Watertown
Trivett, J. C	Watertown
Walters, S. J.	Watertown
Willen, A.	Clark

MADISON-BROOKINGS

DISTRICT No. 3 Pres., H. R. Wold, M.D. Sec., C. M. Kershner, M.D.

Anderson, J. A.	Madison
Austin, D. C.	Brookings
Baughman, D. S.	Madison
Davidson, M.	
Friefeld, S.	
Gulbrandson, G. H.	
Henry, Robert	Brookings
Hurewitz, M.	Flandreau
2201201120113	I IUIIUI CUU

Kershner, C. M Kolp, B. A	
Muggley, J. A.	Volga Madison
Otey, B. T. Patt, W. H.	Flandreau Brookings
Peeke, A. P	Volga
Plowman, E. T Roberts, C. S., Jr La	

Scheller, D. L.	Arlington
Tank, M	Brookings
Watson, E. S.	Brookings
Weir, M. J	Madison
Westaby, J. R.	Madison
Whitson, G. E.	Madison
Wold, H. R	Madison

PIERRE DISTRICT No. 4 Pres., L. C. Askwig, M.D. Sec., M. M. Morrissey, M.D.

Askwig, L. C.	Pierre
Collins, E. H.	Gettysburg
Cowan, J. T.	Pierre
Ehik, G	Dupree
Fox, S. W	Pierre
Horthy, K.	_ Kennebec
Horthy, H.	Kennebec
Hura, R.	Eagle Butte

Jahraus, R. C.	Pierre
Janis, J. B	Hoven
Martin, H. B.	Harrold
Morrissey, M. M.	
Murphy, J. C.	Murdo
Riggs, T. F.	
Risma, A.	California

*Robbins, C. E	Pierre
Salladav, I. R.	Pierre
Simon, S	Pierre
Sundet. N. J	Kadoka
Swanson, C. L.	Pierre
Tesar. C., M.M.	Pierre
Urbanyi, E. W	Gettysburg
Van Heuvelan, G. J	Pierre

HURON DISTRICT No. 5 Pres., Paul Hohm, M.D. Sec., C. F. Gryte, M.D.

Adams, H. P	Huron
Avos-Avotins K	Carthage
Batt, B	Woonsocket
Buchanan, R. A.	Huron
Burman, G. E.	De Smet
Carefoot, R. L.	Huron
Charbonneau, Y	Huron
*Cogswell, M. E	Wolsey
Dean, Roscoe W	less. Springs
Gryte, C. F	Ĥuron

Auld, C. V. Plankinton
Binder, C. F. Chamberlain
*Bobb, C. S. Mitchell
Bobb, E. C. Mitchell
Bollinger, W. F. Parkston
Brogdon, P. P. Mitchell
Delaney, Robert Mitchell
Delaney, W. A., Sr. Mitchell
Delaney, W. A., Jr. Mitchell
*Dick, L. C. Spencer
Gillis, F. D., Sr. Mitchell
Gillis, F. D., Jr. Mitchell
Holland, L. W. Chamberlain

Hagin, J. C Hofer, E. A	Huron
Hohm, P Hohm, T Howard, I. R	Huron
Jacoby, Hans	Huron
Kilpatrick, W. R. J	Huron
Leigh, F. D	Huron
Lenz, B. T	Huron

McManus, T. B Wess. Springs
Pangburn, M. W Miller
Saxton, W. H Huron
*Saylor, H. L., Sr Huron
Saylor, H. L., Jr Huron
Tschetter, Joseph Huron
Tschetter, P. S. Huron
*Wood, T. J Huron
*Wright, O. R. Huron

MITCHELL

DISTRICT No. 6
Pres., Wm. Bollinger, M.D.
Sec., Preston Brogdon, M.D.

*Hoyne, A. H	Salem
*Keene, F. F	Wess. Springs
Lloyd, J. H	Mitchell
Mabee, D. R	Mitchell
Mabee, O. J	Mitchell
Moran, C. S	Mitchell
Nelimark, D. R.	Mitchell
Peiper, W. A	Mitchell
Pollerman, T	Alexandria
Porter, M.	Parkston

Price, Mary	Armour
Price, Ronald	Armour
Rieb, W. G	Parkston
Skogmo, B. R	Mitchell
*Stegeman, S. B	Salem
Stevens, C	Mitchell
Tobin, F. J	Mitchell
Tobin, L. W	Mitchell
Vonburg, V. R.	Mitchell
Voss, E. P	Kimball
Weber, R. A	Mitchell
Welbes, M. A.	Bridgewater
	_

SIOUX FALLS DISTRICT No. 7 Pres., Wm. Sercl, M.D. Sec., C. A. Stern, M.D.

Green, C. D. Parker

Akland I. M.M	Sioux	Falls
Akland, L., M.M Anderson, W. R	Sioux	Falls
Angelos, T. Arneson, W. A.	C	anton
Arneson W A	Sioux	Falls
Becker S.	Sioux	Falls
Becker, S. Billingsley, P. R.	Sioux	Falls
Billion, T. J., Jr.	Sloux	F'alls
Breit, D. J.	Sioux	Falls
Breit, D. J. Brzica, S. M.	Sioux	Falls
Rurne E A	Sinity	F'alle
Borris, R	P	arker
Borris, R. Carney, Myrtle Clark, J. C. Collins, R. E. Cottam, G. I. W.	K	ansas
Clark, J. C	Sioux	Falls
Collins, R. E.	Mor	itrose
Cottam, G. I. W	Sioux	Falls
Cutshall, V. H	Sloux	rams
Dehli, H. M	<u>C</u>	olton
Devick, J. C.	C	olton
Dickinson, J.	Can	istota
Donahoe, J. W.	Sioux	Falls
Donahoe, R. R.	Sloux	Falls
Donahoe, S. A.	Sloux	Falls
Donahoe, W. E.	a.	T 11
Driver, D. R.	Sloux	raiis
	Ciann	T2-11-
Dulmstra, F	Sioux	Falls
Eggers, M. W.	Sioux Sioux	Falls Falls
Eggers, M. W Eirinberg, I	Sioux Sioux	Falls Falls
Eggers, M. W. Eirinberg, I. Erickson, E.	Sioux Sioux Sioux	Falls Falls Falls
Driver, D. R. Duimstra, F. Eggers, M. W. Eirinberg, I. Erickson, E. Farrell, H. W.	Sioux Sioux Sioux	Falls Falls Falls
Eggers, M. W. Eirinberg, I. Erickson, E. Farrell, H. W. Fisk, R. G.	Sioux Sioux Sioux	Falls Falls Falls
Eggers, M. W. Eirinberg, I. Erickson, E. Farrell, H. W. Fisk, R. G. Fisk, R. R. Fisk, R. R.	Sioux Sioux Sioux	Falls Falls Falls
Eggers, M. W. Eirinberg, I. Erickson, E. Farrell, H. W. Fisk, R. G. Fisk, R. R. *Gage, E. Cargas B. R	Sioux Sioux Sioux	Falls Falls Falls
Eggers, M. W	Sioux Sioux Sioux	Falls Falls Falls
Eggers, M. W. Egrinberg, I. Erickson, E. Farrell, H. W. Fisk, R. G. Fisk, R. R. *Gage, E. E. Gargas, B. R. Giebink, R. R. Gregg, J. B.	Sioux Sioux Sioux Sioux Sioux Dell R Flanc Sioux Sioux Sioux	Falls Falls Falls Falls apids dreau Falls Falls Falls Falls

Greenfield, D.	Sioux	Falls
Greenfield, D	Sioux	Falls
Greenfield, R. E., N	Л.M.	
	Sioux	Falls
Greenough, E. E. M	.M.	
	Sioux	Falls
Groebner, O. A.	Sioux	Falls
*Grove, A. F	Dell R	apids
Grove, M. S	Sioux	Falls
Hage, W Hansen, H. F	Sioux	Falls
Hansen, H. F.	Sioux	Falls
Hieb, W. E	M	arion
Hieb, W. E. Hoskins, J. H. *Hummer, H. R. Hyden, A. Ihle, C. W.	Sioux	Falls
*Hummer, H. R	Sioux	F'alls
Hyden, A.	Sioux	Falls
inie, C. W	Sloux	Falls
Jones. W. L	Sloux	raiis
Keller, S. A.	Sioux	rails
Kemper, C. E.	V	Dorg
King, L. Kittelson, H. O.	Sioux	
Kittelson, H. U	Sioux	Falls
Kittelson, J. A.	Sioux Sioux	rails
Knowles, R. C. Kohlmeyer, F. C.	Sioux	Falls
Lamb H	Sioux	Falls
Lamb, H. Larson, C. S.	Sioux	Falls
Leraan, L. G.	Sioux	Falls
Lietzke, E. T.	Boro	cford
Logan, R. W.	Dere	couri
Low Lyman	IVIIS	nnov
Low, Lyman Maclean, D. W	Sioux	Falls
Magdsick C C Jr	Sioux	Falls
Magdsick, C. C., Jr., Maresh, E. R. Myrabo, A. K. Mitchell, C. B.	Sioux	Falls
Myrabo, A. K.	Sioux	Falls
Mitchell C B	Sioux	Falls

McDonald, C. J McGreevy, E. J., M.I		Falls
1.10010019, 11. 01, 11.11	Sioux	Falls
McGreevy, J. V	Sioux	
Nelson J A	Sioux	Falls
Nilsson, F. C.	Sioux	Falls
Nilsson, F. C Ogborn, R. J	Sioux	Falls
Olson, R. G.	Sioux	Falls
Opheim. W. L	Sioux	Falls
Orr, Russell Pankow, L. J	Sioux	Falls
Pankow, L. J.	Sioux	Falls
Parke, L. L.	C	anton
Peik, D. J	Sioux	Falls
Peik, D. J Quinn, R. H	Sioux	Falls
Reagan, P. C	Sioux	Falls
Reagan, R.	Sioux	
Rich, E. L	Sinux	Falls
Sercl, WShreves, HSmith, G. W	Sioux	Falls
Shreves, H	Sioux	Falls
Smith, G. W	Sioux	Falls
Stanman, F	Sloux	ralls
Stern, C. A.	Sioux	Falls
*Stevens, G. A.	Sioux	Falls
Suckow, E. E VanDemark, R. E	Garr	etson
VanDemark, R. E	Sioux	Falls
VanDemark, W. E	Sioux	Falls
Wonlier D. C	C:	77-11-
Volin, H. P. Volin, V. V. Wessen, N. E.	Le	nnox
Volin, V. V	Sioux	Falls
Wessmen, N. E.	Sioux	Falls
williams, D. B	Sloux	Falls
*Zimmerman, Goldie		
Missoul	a, Mor	ntana

YANKTON DISTRICT No. 8 Pres., R. F. Livingston, M.D. Sec., M. Auld, M.D.

Abts, F. J	Yankton
Auld, Marian	Yankton
Auld, Marian Auld, M. A	Yankton
Baum, O	Yankton
*Beall, L. F.	Irene
Eyres, T. E.	
Fairbanks, W. H.	Vermillion
Flynn, E.	Pickstown
Foley, R. J.	Tyndall
Forster, K. M.	
Glood, D.	Viborg
Grover, W. W.	Vankton
Haas, F. W.	
11aas, r. W	Idlikuli

Hill, J. F. *Hohf, J. A. Hubner, R. F. Johnson, C. F. Jordan, G. T. *Joyce, E. Kaufman, I. I., M.M. Kelsey, F. C. Liebert, M. Livingston, R. F. Lyso, M.	Yankton Yankton Yankton Vermillion Hurley Freeman Vermillion Yankton Yankton
Livingston, R. F.	Yankton Yankton Yankton

Moore, E. J Vermillion
McVay, C. B Yankton
Ranney, B Yankton
Reaney, D. B Yankton
Reding, A. P Marion
Sattler, T. H. Yankton
Stansbury, E. M Vermillion
Steele, J. P. Yankton
Thompson, W. V., M.M.
Vermillion
Tidd, J. T Yankton
Willcockson, T. H. Yankton

BLACK HILLS DISTRICT No. 9 Pres., H. J. Grau, M.D. Sec. J. J. Feehan, M.D.

Ahrlin, H.	Rapid City
Bailey, J. D.	Rapid City
Bailey, S. G.	Hot Springs
Behrens, C. L.	Ranid City
Poulsman D	Panid City
Berkman, D.	Itapiu City
Borgmeyer, H. J.	Rapid City
Boyce, R. A.	Rapid City
Bradshaw, F. J.	Ft. Meade
Bray, R. B	Rapid City
Boyce, R. A. Bradshaw, F. J. Bray, R. B. Brownell, M.D.	Rapid City
Butler, J. M	Hot Springs
Byrne, J. R	Edgemont
Byrne, J. R Chassell J. L	Belle Fourche
Clark, B. S	Spearfish
Clark, C. A	Lead
Clark, B. S. Clark, C. A. Cosgrove, G. E.	Rapid City
Crane, H. L.	California
Crane, H. L. Davidson, H. E. Davis, J. H.	Lead
Davis J H	Belle Fourche
Dawley, W. A.	Rapid City
Day M	Rapid City
Day, M. Dillon, J. A., M.M.	Rapid City
Dulaney C H	Et Moode
Dulaney, C. H. Feehan, J. J.	Ponid Citer
*Floorer D D	Rapid City
*Fleeger, R. B Geib, W Gilbert, F. J	Lead
Gelb, W.	Rapid City
Gilbert, F. J.	Beile Fourche
Grau, H. J.	Rapid City
Hamm, J. N Hare, H. J	Sturgis
Hare, H. J	Rapid City

Hare, Lyle *Heineman, A. A. Hesz, A. B. Holleman, W. W. Howe, F. S. Hvam, Ole *Jackson, A. S. *Jackson, R. J. Jackson, T. F. Jernstrom, R. E. Jones, W. E. Kegaries, D. L. Kobza, V. V. Koren, Paul Lampert, A. A. Leeds, J. F. Lemley, R. E. Mattox, J. E. Mattox, J. E. Mede, T. Merryman, M. P. Meyer, W. L. Mills, G. W. *Miller, G. H. *Morse, W. E. Morsman, C. F.	Deadwood Quinn Lead Rapid City Hot Springs Rapid City Sturgis Rapid City Rapid City Rapid City Rapid City Deadwood Deadwood Deadwood Spearfish Rapid City Sanator Wall Spearfish Rapid City Hot Springs
*Morse, W. E	Rapid City
McCroskey, R. C	Rapid City
Munson, H. B Namminga, S. E	Rapid City
Namminga, S. E Newby, H. D	Rapid City

Olsson, G O'Toole, T. F Owen, G. S *Owen, N. T	Rapid City
O'Toolo T F	Rapid City
O 1001e, 1. F	Rapid City
towen, G. S	Papid City
*Owen, N. T	Rapid City
Paulson, G. S.	Rapid City
Pemberton, M. O.	Deadwood
Phillips, R. K.	riot Springs
Pokorny, J. F	Newell
Pokorny, J. F. Roper, C. E., M.M.	_ Hot Springs
Radusch, F. J.	Rapid City
Radusch, F. J Riner, H. L. Rudolph, F. A	_ New Mexico
Rudolph, F. A.	Pennsylvania
Rund E. T.	Rapid City
Ruud, E. T. Saxton, A. J.	Rapid City
Sehring F II	Martin
Sebring, F. U Semones, A., Jr., I	// M Lead
Sherrill, S. F.	Rolle Fourche
Clingabyr I B	Rapid City
Slingsby, J. B.	Dondwood
Smiley, J. C.	Tood
Soe, C. A. Spain, M. L. Stewart, J. L.	Danid City
Spain, M. L	Rapid City
*Stewart, J. L	Speariisn
Stewart, N. W. *Townsend, L. J.	Lead
*Townsend, L. J.	Belle Fourche
Westaby, R. S., Jr.	Martin
Westaby, R. S., Jr. White, W. W.	McLaughlin
Whitney, N. R	Rapid City
Williams, F. R	Rapid City
Wood, G. F. Yackley, J. V.	Rapid City
Yackley, J. V.	Rapid City
Zarbaugh, G. F	Deadwood

Clark, F. J. Gregory Hayes, R. H. Winner Lakstigala, P. White River

DISTRICT No. 10	
Lillard, R. L. Quinn, R. J.	Burke Burke

ROSEBUD

Roesel, R.	W.		 _ Burke
Studenberg	ξ, J.	Ε.	 Winner

*George, W. A	Selbv
Jestadt, J. J., M.M.	Lemmon
Lowe, C. E	Mobridge
Lowe, H	
Lowe, J. A	Mobridge

Nolan, B. P	Mobridge
Spiry, A. W	Mobridge
Steiner, P. K.	_ Lemmon
Torkildson, G. C M	[cLaughlin

NORTHWEST DISTRICT No. 11 Pres., C. E. Lowe, M.D. Sec., B. P. Nolan, M.D.

Totten, F. C	Lemmon
Warpinski, M. A.	McLaughlin
Zandersons, Vilas	
Zeidaks, O	Isabel
•	

WHETSTONE VALLEY DISTRICT No. 12 Pres. E. A. Johnson, M.D. Sec., D. Lie, M.D.

ay

*Jacotel, J. A. _____ Milbank Karlin, W. H. ____ Webster Lovering, J. _____ Webster Pfister, F. F. ____ Webster

Gregory, D. A. _____ Milbank *Hawkins, A. P. ____ Waubay

M.M. Indicates Military Member

Roster-South Dakota Medical Association-1954

A111 T	7/ 7/ Ciarra	- Talla
Akland, L	., M.M Sioux	rais
Abts, F. J	Ya	ınkton
Adams H	D	Huron
Audins, II	· ± ·	1101011
Ahrlin, H.	. L Rapi	a City
Allen S. V	V. Wate	rtown
A 1 T	D Ab	ndoon
Alway, J.	D ADE	rueen
Anderson.	J. A M	adison
Andorgon	W P Sious	Falle
Anderson,	w. R Sloux	raiis
Argabrite,	J. W Wate	ertown
Angalog	r (anton
Aligeros,		
Arneson,	W Sloux	Falls
Askwig I	4. C.	Pierre
Auld C T	Dlon	leinton
Auia, C. v	Plan	Kinton
Auld, M. A	A. Ya	ınkton
Auld Max	ion I Vo	nleton
Auia, Mai	Tan L Ya	inkion
Auskaps.	R Lake N	lorden
Auctin D	C Brow	akinge
Austin, D.	C DIO	okiliga
Avos, Avo	otins, K Cai	rthage
Railey J	D Ranie	d Cify
Dailey, C.	C TI-+ C	4 0103
Baney, S.	G Hot S	prings
Bartron, C	F. R., M.M. Wate	rtown
Bartran F	I I'Ir Wate	rtourn
Dai ii Oli, I	1. J., JI Wate	TOWI
Batt, B	Woon	socket
Raughman	DS M	adicon
Daugiillai	4	1-4
Baum, Ot	ю Үа	ınkton
*Beall I	F.	Irene
Dealess C	C:	- 17-11-
Becker, S.	Sloux	rails
Behrens, (C. L. Rapi	d City
Dombon T	NT AL.	u 0103
perpos J.	IV ADE	eraeen
Berkman.	D. Rapi	d City
Borging P	TD	orrdla
Berzins, n	,, D	owate
Billingslev	7. P. R Sioux	: Falls
Billion T	T Tr Cioux	Follo
Diriton, T.	J., JI SIOUX	. rans
Binder, C.	F Chamb	erlain
Bloemend	aal G. J. Tr	newich
*D-1-1- C	C	, 1 11
"Bobb, C.	S M	itcheil
Bobb, E. C	T. M	itchell
	TTT TO	
		-1+
Bollinger,	W. F Pa	rkston
Bollinger, Borris, R.	W. F Pa	rkston Parker
Bollinger, Borris, R.	W. F Pa C I	rkston Parker
Bollinger, Borris, R. Borgmeye	W. F Pa C I r, H. J Rapi	rkston Parker d City
Bollinger, Borris, R. Borgmeye Boyce, R.	W. F Pa C I r, H. J Rapi A Rapi	rkston Parker d City d City
Bollinger, Borris, R. Borgmeye Boyce, R. Brakss, V	W. F	rkston Parker d City d City ewood
Bollinger, Borris, R. Borgmeye Boyce, R. Brakss, V.	W. F. Pa C. I r, H. J. Rapi A. Rapi — Castl	rkston Parker d City d City ewood
Bollinger, Borris, R. Borgmeye Boyce, R. Brakss, V. Bray, R. I	W. F. Pa C. Rapi r, H. J. Rapi A. Rapi Castl B. Rapi	rkston Parker d City d City ewood d City
Bollinger, Borris, R. Borgmeye Boyce, R. Brakss, V. Bray, R. I Breit, D.	W. F. Pa C. I r, H. J. Rapi A. Rapi Gastl B. Rapi J. Sioux	rkston Parker d City d City ewood d City r Falls
Bollinger, Borris, R. Borgmeye Boyce, R. Brakss, V. Bray, R. I Breit, D. S	W. F. Pa C. I r, H. J. Rapi A. Rapi B. Castl B. Rapi J. Sioux	rkston Parker d City d City ewood d City r Falls
Bollinger, Borris, R. Borgmeye Boyce, R. Brakss, V. Bray, R. I Breit, D *Brenckle	W. F. Pa C. I r, H. J. Rapi A. Rapi Castl 3. Rapi J. Sioux	rkston Parker d City d City ewood d City r Falls ellette
Bollinger, Borris, R. Borgmeye Boyce, R. Brakss, V. Bray, R. I Breit, D. & *Brenckle Brzica, S.	W. F. Pa C. II C. II T, H. J. Rapi A. Rapi Castl B. Rapi J. Sioux J. Sioux M. Sioux	rkston Parker d City d City ewood d City r Falls ellette
Bollinger, Borris, R. Borgmeye Boyce, R. Brakss, V. Bray, R. I Breit, D *Brenckle Brzica, S. Brown H	W. F. Pa C. I r, H. J. Rapi A. Rapi Castl B. Rapi J. Sioux J. J. F. M M. Sioux B. Water	rkston Parker d City d City ewood d City r Falls ellette
Bollinger, Borris, R. Borgmeye Boyce, R. Brakss, V. Bray, R. I Breit, D. *Brenckle Brzica, S. Brown, H.	W. F. Pa C. I T. Rapi A. Rapi Castl 3. Rapi J. Sioux M. Sioux R. Wate	rkston Parker d City d City ewood d City r Falls ellette r Falls
Bollinger, Borris, R. Borgmeye Boyce, R. Brakss, V. Bray, R. I Breit, D. & *Brenckle Brzica, S. Brown, H. Brownell,	W. F. Pa C. If r, H. J. Rapi A. Rapi B. Castl B. Rapi J. Sioux J. J. F. M M. Sioux R. Wate M. E. Rapi	rkston Parker d City d City ewood d City r Falls erlette r Falls ertown d City
Bollinger, Borris, R. Borgmeye Boyce, R. Brakss, V. Breit, D. *Brenckle Brzica, S. Brown, H. Brownell, *Bruner, J.	W. F. Pa C. I r, H. J. Rapi A. Rapi Castl 3. Rapi J. Sioux M. Sioux R. Wate M. Rapi M. Rapi	rkston Parker d City d City ewood d City r Falls ellette r Falls ertown d City
Bollinger, Borris, R. Borgmeye Boyce, R. Brakss, V. Bray, R. I Breit, D. *Brenckle Brzica, S. Brown, H. Brownell, *Bruner, J.	W. F. Pa C. I r, H. J. Rapi A. Rapi Castl Rapi J. Sioux M. Sioux R. Wate M. E. Rapi L. E. Ab	rkston Parker d City d City ewood d City ralls ellette ralls rtown d City
Bollinger, Borris, R. Borgmeye Boyce, R. Brakss, V. Bray, R. I *Breit, D. *Brenckle Brzica, S. Brown, H. *Bruner, J. Bradshaw	W. F. Pa C. I r, H. J. Rapi A. Rapi Castl S. Rapi J. Sioux M. Sioux R. Wate M. E. Rapi L. Rapi J. F. Abe J. F. J. Ft.	rkston Parker d City d City ewood d City x Falls ellette x Falls ertown d City erdeen Meade
Bollinger, Borris, R. Borgmeye Boyce, R. Brakss, V. Bray, R. I. Brenckle Brzica, S. Brown, H. Brownell, *Bruner, J. Bradshaw Buchanan	W. F. Pa C. I r, H. J. Rapi A. Rapi 3. Rapi J. Sioux M. Sioux R. Wate M. E. Rapi I. E. Abc F. J. Ft. R. A. Ft.	rkston Parker d City d City ewood d City x Falls ellette x Falls ertown d City erdeen Meade Huron
Bollinger, Borris, R. Borgmeye Boyce, R. Brakss, V. Bray, R. I Breit, D. & *Brenckle Brzica, S. Brown, H. Brownell, *Bruner, J Bradshaw Buchanan	W. F. Pa C. If r, H. J. Rapi A. Rapi J. Castl J. Sioux J. J. F. M M. Sioux R. Wate M. E. Rapi J. E. Abo J. F. J. Ft. J. R. Abo	rkston Parker d City d City ewood d City x Falls ellette x Falls ertown d City erdeen Meade Huron
Bollinger, Borris, R. Borgmeye Boyce, R. Brakss, V. Bray, R. I. Breit, D. *Brenckle Brzica, S. Brown, H. Brownell, *Bruner, J. Bradshaw Buchanan Bunker, F.	W. F. Pa C. I C. I A. Rapi A. Rapi Castl B. Rapi J. Sioux M. Sioux R. Wate M. E. Rapi J. E. Abo J. Ft. Abo J. F. Abo	rkston Parker d Cityy d Cityy ewood d Cityy x Falls rtown d City erdeen Meade Huron erdeen
Bollinger, Borris, R. Borgmeye Boyce, R. Brakss, V. Bray, R. I Breit, D. *Brenckle Brzica, S. Brown, H. Brownell, *Bruner, J Bradshaw Buchanan Bunker, I Burman, O	W. F. Pa C. If r, H. J. Rapi A. Rapi B. Castl B. Rapi J. F. M M. Sioux R. Wate M. E. Rapi E. Abe F. J. Ft. R. A. Be G. E. De	rkston Parker d City d City ewood d City k Falls ellette x Falls rtown d City endeen Meade Huron erdeen
Bollinger, Borris, R. Borgmeye Boyce, R. Brakss, V. Bray, R. I. *Breit, D. *Brenckle Brzica, S. Brownell, *Bruner, J. Bradshaw Buchanan Bunker, F. Burman, G. Burns, F.	W. F. Pa C. I r, H. J. Rapi A. Rapi Gastl B. Rapi J. Sioux M. Sioux R. Wate M. E. Rapi J. E. Abo J. F. J. Ft. R. A. G. Abo G. E. Do G. A. Sioux	rkston Parker d City d City ewood d City x Falls cellette x Falls ed City ertown Meade Huron erdeen e Smet
Bollinger, Borris, R. Borgmeye Boyce, R. Brakss, V. Bray, R. I Breit, D. *Brenckle Brzica, S. Brown, H. Brownell, *Bruner, J Bradshaw Buchanan Bunker, F. Burman, G.	W. F. Pa C. I r, H. J. Rapi A. Rapi B. Castl B. Sioux J. F. M M. Sioux R. Wate M. E. Rapi I. E. Abc J. F. J. Ft. J. F. J. Ft. J. F. J. Sioux J. E. De A. Sioux M. Hate	rkston Parker d Cityd d Citye ewoodd City x Falls ellette x Falls rtown d Cityerdeen Meade Huron erdeen e Smet x Falls
Bollinger, Borris, R. Borgmeye Boyce, R. Brakss, V. Bray, R. I. *Breit, D. *Brenckle Brzica, S. Brown, H. Brownell, *Bruner, J. Bradshaw Buchanan Bunker, I. Burman, G. Burns, E. Butler, J.	W. F. Pa C. I r, H. J. Rapi A. Rapi Castl B. Rapi J. Sioux M. Sioux R. Wate M. E. Rapi L. Abe F. J. Ft. R. A F. Abe G. Abe G. E. De A. Sioux M. Hot S	rkston Parker d City d City ewood d City x Falls ellette x Falls rtown d City erdeen Meade Huron erdeen e Smet x Falls
Bollinger, Borris, R. Borgmeye Boyce, R. Brakss, V. Bray, R. I. Breit, D. *Brenckle Brzica, S. Brown, H. Brownell, *Bruner, J. Bradshaw Buchanan Bunker, F. Burman, G. Burns, E. Butler, J. Byrne, J.	W. F. Pa C. I C. I R. Rapi A. Rapi A. Rapi Gastl B. Rapi J. Sioux M. Sioux R. Wate M. E. Rapi J. E. Abe J. F. De A. Sioux M. Hot S R. Edg	rkston Parker d City d City d City ewood d City k Falls ertown d City erdeen Meade Huron erdeen e Smet k Falls prings emont
Bollinger, Borris, R. Borgmeye Boyce, R. Brakss, V. Bray, R. I *Breit, D. *Brenckle Brzica, S. Brown, H. Brownell, *Bruner, J. Bradshaw Buchanan Bunker, F. Burman, G. Burns, E. Butler, J.	W. F. Pa C. I r, H. J. Rapi A. Rapi Castl Sioux J. Sioux R. Wate M. Sioux R. Wate M. E. Rapi J. E. Abe J. F. J. Ft. R. A. Sioux A. Sioux R. Abe J. C. G. Abe A. Sioux M. Hot S R. Edg	rkston Parker d Cityy d Cityy ewoodd Cityx r Falls ellette r Falls rtown d Cityy erdeen Meade Huron e Smet r Falls prings emont
Bollinger, Borris, R. Borgmeye Boyce, R. Brakss, V. Bray, R. I. Breit, D. *Brenckle Brzica, S. Brown, H. Brownell, *Bruner, J. Bradshaw Buchanan Bunker, F. Butler, J. Byrne, J. Calene, J.	W. F. Pa C. II C.	rkston Parker d City d City d City ewood d City k Falls ertown d City ex Falls ertown d City ex Falls ertown erdeen erdeen erdeen erdeen erdeen erdeen erdeen erdeen erdeen
Bollinger, Borris, R. Borgmeye Boyce, R. Brakss, V. Bray, R. I Breit, D. *Brenckle Brzica, S. Brown, H. Brownell, *Bruner, J. Bradshaw Buchanan Bunker, F. Burman, C. Burns, E. Butler, J. Byrne, J. Calene, J. Campbell,	W. F. Pa C. If r, H. J. Rapi A. Rapi B. Castl B. Rapi J. F. M M. Sioux M. E. M. E. Rapi I. E. Abe G. F. De A. Sioux M. Hot S R. Edg L. Abe D. F. Wate	rkston Parker d Cityy d Cityy ewoodd Cityx Falls ellette c Falls rtown d Cityy erdeen Meade Huron erdeen prings emont erdeen errdeen
Bollinger, Borris, R. Borgmeye Boyce, R. Brakss, V. Bray, R. I. Breit, D. *Brenckle Brzica, S. Brown, H. Brownell, *Bruner, J. Bradshaw Buchanan Bunker, F. Burman, C. Burns, E. Butler, J. Calene, J. Campbell,	W. F. Pa C. I r, H. J. Rapi A. Rapi A. Rapi Gastl B. Rapi J. Sioux R. Wate M. E. Rapi J. E. Abo G. F. De A. Sioux M. Hot S R. Edg L. Abo D. F. Wate	rkston Parker d Cityd d Cityd ewoodd Cityc Falls ertown d Citye ertown d Citye ex Falls ertown erdeen ertown erdeen erdeen
Bollinger, Borris, R. Borgmeye Boyce, R. Brakss, V. Bray, R. I Breit, D. *Brenckle Brzica, S. Brown, H. Brownell, *Bruner, J Bradshaw Buchanan Bunker, F Burman, C Burns, E. Butler, J. Calene, J. Campbell, Carney, M.	W. F. Pa C. I r, H. J. Rapi A. Rapi B. Castl B. Rapi J. F. M M. Sioux M. Sioux M. E. Rapi J. E. Abc J. F. J. F. J. Ft. J. R. A. Sioux M. Hot S R. Edg L. Abc D. F. Wate Myrtle F	rkston Parker d City d City dewood d City x Falls ellette x Falls rtown d City erdeen Meade Huron erdeen Esmet x Falls prings emont erdeen artown Xansas
Bollinger, Borris, R. Borgmeye Boyce, R. Brakss, V. Bray, R. I. Breit, D. *Brenckle Brzica, S. Brown, H. Bruner, J. Bradshaw Buchanan Bunker, F. Burman, E. Butler, J. Byrne, J. Calene, J. Campbell, Carney, M. Carefoot,	W. F. Pa C. I r, H. J. Rapi A. Rapi B. Castl B. Rapi J. F. M M. Sioux R. Wate M. E. Rapi J. E. Abo J. F. J. Ft. J. G. Abo G. E. Do A. Sioux M. Hot S R. Edg L. Abo D. F. Wate Myrtle F R. L. Wate	rkston Parker d City d City ewoodd City c Falls erleete k Falls erdeen Meade Huron erdeen e Smet x Falls prings emont erdeen extansas Huron
Bollinger, Borris, R. Borgmeye Boyce, R. Brakss, V. Bray, R. I Breit, D. *Brenckle Brzica, S. Brown, H. Brownell, *Bruner, J. Bradshaw Buchanan Bunker, F. Burman, C. Burns, E. Butler, J. Calene, J. Campbell, Carney, Carefoot, Charbonn, Charbonn, Charbonn, Charbonn, R. Borris, R. Carefoot, Charbonn, Charbonn, R. Carefoot, Charbonn, R. Carefoot, R. Carefoot, R. Charbonn, R. Carefoot, R. Charbonn, R. Carefoot, R. Carefoo	W. F. Pa C. I C. I C. I R. Rapi A. Rapi A. Rapi B. Rapi J. Sioux M. Sioux R. Wate M. E. Rapi J. E. Abo J. F. De A. Sioux M. E. Abo J. F. De A. Sioux M. Hot S R. Edg L. Abo D. F. Wate Myrtle F R. L.	rkston Parker d Cityy d Cityy ewoodd d Cityx Falls et Falls et Falls et General d Cityer deen Meade Huron erdeen e Smet k Falls prings pemont cansas Huron Huron
Bollinger, Borris, R. Borgmeye Boyce, R. Brakss, V. Bray, R. I. *Breit, D. *Brenckle Brzica, S. Brown, H. Brownell, *Bruner, J. Bradshaw Buchanan Bunker, F. Burman, G. Burns, E. Butler, J. Byrne, J. Calene, J. Campbell, Carney, I. Carefoot, Charbonn	W. F. Pa C. I	rkston Parker d Cityyd Cityyd Cityyd Cityyewoodd Cityyc Falls c Falls c Falls c Falls c Falls c Falls c Falls c Falls prings c Falls prings c Falls prings c Falls prings c Falls prings c Falls prings c Falls prings c Falls
Bollinger, Borris, R. Borgmeye Boyce, R. Brakss, V. Bray, R. I Breit, D. *Brenckle Brzica, S. Brown, H. Brownell, *Bruner, J. Bradshaw Buchanan Bunker, F. Butler, J. Calene, J. Campbell, Carney, M. Carefoot, Charbonn, Chassell, *Edition of the control of the co	W. F. Pa C. If C.	rkston Parker d City d City d City ewood d City k Falls et Falls et Falls erdeen Huron erdeen
Bollinger, Borris, R. Borgmeye Boyce, R. Brakss, V. Bray, R. I Breit, D. *Brenckle Brzica, S. Brown, H. Brownell, *Bruner, J Bradshaw Buchanan Bunker, I Burman, (Burns, E. Butler, J. Calene, J. Calene, J. Campbell, Carney, M. Carefoot, Charbonn Chassell, *Christian	W. F. Pa C. I r, H. J. Rapi A. Rapi A. Rapi Gastl B. Rapi J. Sioux R. Wate M. Sioux R. Wate M. E. Rapi J. E. Abe J. F. J. Ft. R. A. Sioux M. Hot S R. Edg L. Abe J. F. Wate M. Hot S R. Edg L. Abe J. F. Wate Myrtle F R. L. Eau, Y. Belle F Sioux M. Belle F R. L. Belle F Sioux M. Belle F R. L. Belle F Sioux M. Hot S R. Edg J. L. Belle F R. L. Belle F Sioux M. B	rkston Parker d Cityy d Cityy ewoodd Cityy e Falls e Ellette c Falls ertown d City erdeen erdeen e Smet k Falls prings emont ertown Kansas Huron Furon Curche Clark
Bollinger, Borris, R. Borgmeye Boyce, R. Brakss, V. Bray, R. I Breit, D. & Brenckle Brzica, S. Brown, H. Brownell, *Bruner, J. Bradshaw Buchanan Bunker, F. Butler, J. Byrne, J. Calene, J. Campbell, Carney, M. Carefoot, Charbonne Chassell, & *Christian	W. F. Pa C. I	rkston Parker d City d City ewood d City k Falls ellette k Falls ertown d City endeen Huron erdeen erdeen rtown Kansas Huron Durche Clark
Bollinger, Borris, R. Borgmeye Boyce, R. Brakss, V. Bray, R. I Breit, D. *Brenckle Brzica, S. Brown, H. Brownell, *Bruner, J. Bradshaw Buchanan Bunker, F. Burman, (Burns, E. Butler, J. Calene, J. Calene, J. Carefoot, Charbonne Chassell, *Christian Clark, B.	W. F. Pa C. I r, H. J. Rapi A. Rapi J. Sioux J. F. M M. Sioux R. Wate M. E. J. E. Abe J. F. J. Ft. J. G. Abe A. Sioux M. Hot S R. Edg L. Abe J. F. Wate Myrtle F R. L. L. Abe J. F. Wate Myrtle F R. L. L. Belle Fo L. Belle Fo L. Belle Fo L. Son, A S. Spe	rkston Parker d City d City ewood d City x Falls ellette x Falls rtown d City erdeen Meade Huron Exansas Huron Huron ourche Clark earfish
Bollinger, Borris, R. Borgmeye Boyce, R. Brakss, V. Bray, R. I. Breit, D. & Brenckle Brzica, S. Brown, H. Brownell, *Bruner, J. Bradshaw Buchanan Bunker, F. Butler, J. Byrne, J. Calene, J. Campbell, Carney, M. Carefoot, Charbonne Chassell, *Christian Clark, B. Clark, C.	W. F. Pa C. I r, H. J. Rapi A. Rapi A. Rapi Gastl B. Rapi J. Sioux R. Wate M. Sioux R. Wate M. E. Rapi J. Ft. Abe G. F. J. Ft. R. A. Sioux M. Hot S R. Edg L. Abe J. F. Wate Myrtle R. L. Eau, Y. J. L. Belle Fo	rkston Parker d City d City ewood d City e Falls er Falls er town d City er Geen Meade e Smet x Falls perings emont erdeen rtown Cansas Huron burche Clark earfish Earfish
Bollinger, Borris, R. Borgmeye Boyce, R. Brakss, V. Bray, R. I Breit, D. *Brenckle Brzica, S. Brown, H. Brownell, *Bruner, J. Bradshaw Buchanan Bunker, F. Burman, Calene, J. Campbell, Carney, Carefoot, Charbonne, Chassell, *Christian Clark, B. Clark, C.	W. F. Pa C. I C. I A. Rapi A. Rapi A. Rapi B. Rapi J. Sioux M. Sioux M. Sioux M. E. Rapi J. E. Abo J. F. De A. Sioux M. E. Abo J. F. De A. Sioux M. Hot S R. Edg L. Abo D. F. Wate Myrtle F R. L. Eau, Y. J. L. Belle Fo Isson, A. Spe A. Spe A. Spe A. Spe A. Spe J. L. Belle F J. Spe J. L.	rkston Parker d City d City ewood d City k Falls ellette k Falls rtown d City erdeen Meade Huron erdeen k Falls prings emont cansas Huron burche Clark earfish
Bollinger, Borris, R. Borgmeye Boyce, R. Brakss, V. Bray, R. I. *Breit, D. *Brenckle Brzica, S. Brown, H. Brownell, *Bruner, J. Bradshaw Buchanan Bunker, F. Burman, G. Burns, E. Butler, J. Byrne, J. Calene, J. Campbell, Carney, M. Carefoot, Charbonne Chassell, *Christian Clark, B. Clark, C. Clark, C.	W. F. Pa C. I I C. I I C. I I C. I I C. C.	rkston Parker d City d City ewood d City ex Falls ellette k Falls ertown d City erdeen Meade Huron erdeen e Smet x Falls prings emont extansas Huron Clark earfish Lead
Bollinger, Borris, R. Borgmeye Boyce, R. Brakss, V. Bray, R. I Breit, D. *Brenckle Brzica, S. Brown, H. Brownell, *Bruner, J. Bradshaw Buchanan Bunker, F. Butler, J. Calene, J. Campbell, Carney, M. Carefoot, Charbonn Chassell, *Christian Clark, C. Clark, C. Clark, F. Clark, F.	W. F. Pa C. I r, H. J. Rapi A. Rapi B. Castl B. Sioux J. F. M M. Sioux R. Wate M. E. J. E. Abo J. F. De A. Sioux J. E. Abo J. F. Wate J. J. Wate J. L. Belle Fo Son, A. Spe A. J. Wate Wate J. Wate J. Wate J. Wate J. G	rkston Parker d City d City ewood d City k Falls et Falls et town d City erdeen Meade Huron erdeen e Smet k Falls prings emont erdeen transas Huron Huron Uurche Clark earfish Lead ertown regory
Bollinger, Borris, R. Borgmeye Boyce, R. Brakss, V. Bray, R. I. Breit, D. *Brenckle Brzica, S. Brown, H. Brownell, *Bruner, J. Bradshaw Buchanan Bunker, F. Burman, G. Burns, E. Butler, J. Byrne, J. Calene, J. Campbell, Carney, I. Carefoot, Charbonn Chassell, *Christian Clark, B. Clark, C. Clark, F. Clark, F. Clark, J.	W. F. Pa C. I r. H. J. Rapi A. Rapi B. Castl B. Sioux J. F. M M. Sioux R. Wate M. E. Rapi J. E. Abc G. Abc G. Abc G. E. Do A. Sioux M. Hot S R. Edg L. Abc J. F. Wate I. Belle Fo Son, A. Spe J. Wate J. Sioux Sioux Sioux	rkston Parker d City d City ewoodd City c Falls e Falls e Falls e Falls ertown d City erdeen Meade Huron Erdeen e Smet t Falls prings emont e Smet t Falls prings emont tansas Huron Clark earfish Lead ertown regory
Bollinger, Borris, R. Borgmeye Boyce, R. Brakss, V. Bray, R. I Breit, D. *Brenckle Brzica, S. Brown, H. Brownell, *Bruner, J. Bradshaw Buchanan Bunker, F. Butler, J. Byrne, J. Calene, J. Campbell, Carney, M. Carefoot, Charbonne Chassell, *Christian Clark, C. Clark, C. Clark, F. Clark, F. Clark, J. Clark, C. Clark, F. Clark, J. Clark, C. Clark, F. C. Clark, F. C. Clark, J. C. Clark, F. C. Clark, J. C.	W. F. Pa C. I	rkston Parker d City d City d City ewood d City ex Falls et Falls ertown d City erdeen Meade Huron erdeen ertown terdeen transas Huron burche Clark earfish Lead rtown carfish
Bollinger, Borris, R. Borgmeye Boyce, R. Brakss, V. Bray, R. I Breit, D. *Brenckle Brzica, S. Brown, H. Brownell, *Bruner, J. Bradshaw Buchanan Bunker, I Burman, G. Burns, E. Butler, J. Calene, J. Campbell, Carney, Charbonn Chassell, *Christian Clark, B. Clark, C. Clark, C. Clark, C. Clark, F. Clark, J. Cargewell	W. F. Pa C. I r. H. J. Rapi A. Rapi J. Sioux J. F. M M. Sioux R. Wate M. E. J. E. Abe J. E. Abe G. Abe G. E. De A. Sioux M. Hot S R. Edg L. Abe J. F. Wate Myrtle F R. L. Belle F Soon, A. S S. Spe A. G J. G C. Sioux W. E. W	rkston Parker d Cityy d Cityy ewoodd Cityy ex Falls ex Falls ex Falls ex Falls ex Falls ex Falls ex Falls prings emont ex Falls prings emont ex Falls prings emont ex Falls y Falls ex Falls ex Falls y Falls ex Falls y Falls ex Falls y Falls ex Falls ex Falls y Falls ex Falls ex Falls y Falls ex Falls ex Falls y Falls ex Falls ex Falls ex Falls y Falls y Falls y Falls y Falls y Falls
Bollinger, Borris, R. Borgmeye Boyce, R. Brakss, V. Bray, R. I Breit, D. & Brenckle Brzica, S. Brown, H. Brownell, *Bruner, J. Bradshaw Buchanan Bunker, F. Butler, J. Byrne, J. Calene, J. Campbell, Carney, M. Carefoot, Charbonne Chassell, *Christian Clark, B. Clark, C. Clark, C. Clark, F. Clark, F. Clark, F. Clark, F. Clark, F. Cogswell Collins, E.	W. F. Pa C. I r, H. J. Rapi A. Rapi B. Castl B. Sioux J. M. M. Sioux R. Wate M. E. M. E. J. F. J. F. J. T. J. J. J. J. J. Wate	rkston Parker d City d City ewood d City k Falls ellette k Falls ertown d City endeen Huron erdeen erdeen erdeen Huron Ourche Clark earfish Lead erfead erfeen trown Kansas Huron ourche carfish Lead exerfish exerfish exerfish sertown yesburg
Bollinger, Borris, R. Borgmeye Boyce, R. Brakss, V. Bray, R. I Breit, D. *Brenckle Brzica, S. Brown, H. Brownell, *Bruner, J Bradshaw Buchanan Bunker, I Burman, C Burns, E. Butler, J. Calene, J. Calene, J. Carefoot, Charbonn Chassell, *Christian Clark, E. Clark, C. Clark, C. Clark, F. Clark, J. (*Cogswell Collins, R. Collins, R.	W. F. Pa C. If r, H. J. Rapi A. Rapi A. Rapi Gastl B. Rapi J. Sioux R. Wate M. Sioux R. Wate M. E. Rapi J. E. Abe J. F. J. Ft. R. A. Sioux M. Hot S R. Edg L. Abe J. F. Wate Myrtle F R. L. Eeau, Y. J. L. Belle F J. L. Belle F J. Sioux M. Sioux M. Hot S R. Edg J. L. Abe J. G. Sioux Myrtle F R. L. Eau, Y. Seau, Y. Sioux J. G. Sioux J. G. Sioux J. Getty E. Mo	rkston Parker d City d City d City ewoodd City e Falls e Falls ertown deade Huron erdeen e Smet k Falls prings emont ex Falls prings emont c Falls v Falls y Falls y Falls ertown Clark earfish Lead ertown c Falls
Bollinger, Borris, R. Borgmeye Boyce, R. Brakss, V. Bray, R. I. Breit, D. *Brenckle Brzica, S. Brown, H. Brownell, *Bruner, J. Bradshaw Buchanan Bunker, I. Burman, E. Butler, J. Byrne, J. Calene, J. Campbell, Carney, I. Carpell, Carney, I. Carpell, *Christian Clark, B. Clark, C. Clark, F. Clark, J. *Cogswell Collins, E. Collins, R.	W. F. Pa C. I r. H. J. Rapi A. Rapi B. Castl B. Sioux J. F. M M. Sioux R. Wate M. E. Rapi J. E. Abo J. F. J. J. G. Abo J. F. Wate M. Hot S R. Edg L. Abo D. F. Wate Myrtle F R. L. Belle Fo Isson, A. Spe A. Sioux J. Wate J. G C. Sioux J. H G. G J. G J. H G G J. G J. G J. G J. G J. G J.	rkston Parker d City d City ewoodd City e Falls e Ellette k Falls ertown d City erdeen Meade Huron erdeen erdeen erdeen erdeen trown Kansas Huron Durche Clark earfish earfish Lead ertown Clark earfish e Swett ertown Clark earfish extrown Clark earfish extrown Clark earfish extrown Clark earfish extrown Clark earfish extrown Clark earfish extrown Clark earfish extrown Clark earfish extrown crow
Bollinger, Borris, R. Borgmeye Boyce, R. Brakss, V. Bray, R. I Breit, D. *Brenckle Brzica, S. Brown, H. Brownell, *Bruner, J Bradshaw Buchanan Bunker, I Burman, (Burns, E. Butler, J. Calene, J. Calene, J. Carefoot, Charbonn Chassell, *Christian Clark, B. Clark, C. Clark, C. Clark, C. Clark, F. Clark, J. (*Cogswell Collins, R. Cooley, F.	W. F. Pa C. I r, H. J. Rapi A. Rapi J. Sioux J. F. M M. Sioux R. Wate M. E. J. F. Abot J. F. J. Ft. J. G. Abot A. Sioux M. Hot S R. Edg L. Abot J. F. Wate J. L. Belle Fo L. Soon, A. S. Spe A. Sioux J. G. Sioux J. G. Sioux J. G. Sioux J. H. Getty J. E. Mo H. Abot H. Abot	rkston Parker d City d City ewood d City k Falls et Falls et Count d City erdeen Meade Huron erdeen erdeen erdeen trown Cansas Huron Huron Huron Clark earfish Lead ertown cregory c Falls prings erdeen rtown Clark earfish earfish regory c Falls ertown regory
Bollinger, Borris, R. Borgmeye Boyce, R. Brakss, V. Bray, R. I. *Breit, D. *Brenckle Brzica, S. Brown, H. Brownell, *Bruner, J. Bradshaw Buchanan Bunker, I. Burman, E. Butler, J. Byrne, J. Calene, J. Campbell, Carney, M. Carefoot, Charbonne, Charbonne, Chark, B. Clark, C. Clark, F. Collins, E. Collins, E. Collins, F. Cooley, F. Cornely	W. F. Pa C. I r. H. J. Rapi A. Rapi B. Castl B. Sioux J. F. M M. Sioux R. Wate M. E. Rapi J. E. Abo J. F. J. Ft. J. J. E. Abo J. E. D. J. C. Soux J. Wate J. Wate J. Wate J. Wate J. Wate J. Sioux J. Wate J. Wate J. H. Getty Getty J. Abo J. J. J. <t< td=""><td>rkston Parker d City d City ewoodd City ex Falls erlette k Falls erdeen Meade Huron erdeen erdeen tarsas Huron Clark earfish c Falls y Falls y Falls erdeen exansas Huron c Clark earfish ex Falls erdeen exarfish c Falls erdeen exarfish</td></t<>	rkston Parker d City d City ewoodd City ex Falls erlette k Falls erdeen Meade Huron erdeen erdeen tarsas Huron Clark earfish c Falls y Falls y Falls erdeen exansas Huron c Clark earfish ex Falls erdeen exarfish c Falls erdeen exarfish
Bollinger, Borris, R. Borgmeye Boyce, R. Brakss, V. Bray, R. I Breit, D. *Brenckle Brzica, S. Brown, H. Brownell, *Bruner, J. Bradshaw Buchanan Bunker, F. Butler, J. Byrne, J. Calene, J. Campbell, Carney, J. Carefoot, Charbonn Chassell, *Christian Clark, C. Clark, C. Clark, F. Clark, J. Cogswell, Collins, E. Collins, R. Cooley, F. Cornely, J. Cotte	W. F. Pa C. I r, H. J. Rapi A. Rapi B. Castl B. Sioux J. F. M M. Sioux R. Wate M. E. Rapi J. E. Abc J. F. De J. G. Abc J. G. Abc J. F. Wate Myrtle F R. L. Belle Fo Ison, A. Spe A. J. J. Wate J. Gr J. Wate J. Gr J. Gr J. Wate J. Gr J. Gr J. Wate J. Mo H. Getty J. Wate J. Wate J. Wate J. Wate J. Wate	rkston Parker d City d City d City ewood d City ex Falls et Falls ertown d City erdeen Meade Huron erdeen erdeen erdeen transas Huron burche carfish Lead ertown x Falls prings emont erdeen ertown transas Huron burche carfish Lead ertown regory x Falls
Bollinger, Borris, R. Borgmeye Boyce, R. Brakss, V. Bray, R. I. Breit, D. *Brenckle Brzica, S. Brown, H. Brownell, *Bruner, J. Bradshaw Buchanan Bunker, F. Burman, G. Burns, E. Butler, J. Byrne, J. Calene, J. Campbell, Carney, M. Carefoot, Charbonn. Chassell, *Christian Clark, C. Clark, C. Clark, C. Clark, C. Clark, C. Clark, F. Collins, E. Collins, E. Collins, E. Collins, E. Cooley, F. Cornely, G. Cottam, G. Cotta	W. F. Pa C. I C. I T. H. J. Rapi A. Rapi B. Castl B. Sioux R. Wate M. E. Rapi J. E. Abe J. E. Abe G. Abe G. E. De A. Sioux M. Hot S R. Edg L. Abe J. F. Wate Myrtle F R. L. Eau, Y J. L. Belle F Soon, A. S S. Spe A. Sioux Wate Sioux W. E. W H. Getty G. I. W. Sioux	rkston Parker d City d City d City ewoodd d City ex Falls erleet ellette erdeen Meade Huron erdeen erdeen ertown Kansas Huron Huron Clark earfish Lead rtown regory c Falls Volsey ysburg ntrose erdeen
Bollinger, Borris, R. Borgmeye Boyce, R. Brakss, V. Brakss, V. Bray, R. I. Breit, D. & Brenckle Brzica, S. Brown, H. Brownell, *Bruner, J. Bradshaw Buchanan Bunker, F. Butler, J. Byrne, J. Calene, J. Campbell, Carney, M. Carefoot, Charbonne Chassell, & *Christian Clark, B. Clark, C. Clark, C. Clark, F. Clark, J. Calene, J. Cogswell Collins, E. Collins, R. Cooley, F. Cornely, J. Cottam, G. Cowan, J. Cowa	W. F. Pa C. I r. H. J. Rapi A. Rapi B. Castl B. Sioux M. Sioux R. Wate M. E. M. E. A. Sioux M. Hot S G. Abe G. Edg L. Abe D. F. Wate Wate Jyrtle F R. L. eau, Y. Wate J. Wate J. Wate J. Gr. S. Spe A. Sioux W. E. M. H. Abe Gr. J. Mo H. Abe J. I. J. Sioux J. J. J. J. J. J. J. J.	rkston Parker d City d City d City ewood d City k Falls et Falls et Falls erdeen Huron erdeen erdeen erdeen transas Huron burche Clark earfish Lead rtown Kong Falls prings earfish Lead erdeen transas Huron burche Clark earfish Earfish Earfish Earfish Falls Falls Pierre
Bollinger, Borris, R. Borgmeye Boyce, R. Brakss, V. Bray, R. I Breit, D. *Brenckle Brzica, S. Brown, H. Brownell, *Bruner, J. Bradshaw Buchanan Bunker, I Burman, G. Burns, E. Butler, J. Calene, J. Campbell, Carney, M. Carefoot, Charbonn. Chassell, *Christian Clark, B. Clark, C. Clark, C. Clark, F. Collins, E. Collins, E. Collins, E. Collins, E. Cooley, F. Cornely, J. Cottam, G. Covan, J. Crane H. Cooley, R. Crane H. Crane	W. F. Pa C. I I I I I I I I I	rkston Parker d City d City d City ewoodd d City e Falls c Falls c Falls ertown d City erdeen Meade e Smet c Falls prings emont ertown Clark earfish Lead rtown regory c Falls Volsey vsburg ntrose erdeen c Falls Pierre
Bollinger, Borris, R. Borgmeye Boyce, R. Brakss, V. Brakss, V. Bray, R. I. Breit, D. & Brenckle Brzica, S. Brown, H. Brownell, *Bruner, J. Bradshaw Buchanan Bunker, F. Butler, J. Byrne, J. Calene, J. Campbell, Carney, M. Carefoot, Charbonne Chassell, Cark, C. Clark, F. Clark, F. Clark, F. Clark, F. Clark, J. (*Cogswell Collins, R. Cooley, F. Cornely, J. Cottam, G. Cowan, J. Crane, H.	, M.M. Sloux, P	rkston Parker d City d City ewoodd d City ex Falls er Cellette k Falls er Ceen Meade ex Falls er Gen er Gen er Gen Huron burche Clark earfish earfish c Falls y Sburg ntrose er Geen Falls Fer Falls Fer Falls Fer Falls Fer Falls Fer Falls Fer Falls Fer Falls Fer Falls Fer Falls For Falls For Falls For Falls

C	T T 317-44
Crawford, J. I	a., Jr. watertown
Currie, K. P.	Britton
Cutchall V H	Sioux Falls
Catsilais, V. II	D
Cosgrove, G.	L Rapid City
Damm, W. P.	Redfield
Davidson H	E Lead
Daviuson, 11.	L. LEad
Davidson, M.	Brookings
Davis, J. H.	Belle Fourche
Davider W A	Panid Cita
Dawley, W. A.	Rapid City
Day, Maxwell	Rapid City
Dean Roscoe	Wess Springs
Delair, Itoscoe .	O-14
Denn, H. M.	Conton
Delaney, R	Mitchel
Delaney W	Δ Mitchel
Delaney, W. 1	T. T
Delaney, W. A	, Jr Mitchell
*Dick. L. C.	Spencer
Dielringen I	Conistate
Dickinson, J.	Camstota
Dillon, J. A., I	vl.M Rapid City
Donahoe J W	I. Sioux Falls
Donahor D. D.	Ciarra Falla
Donanoe, K. K	Sloux Falls
Donahoe, S. A	Sioux Falls
Donahoe W I	Siouv Falls
Drigger E 15	D it
Drissen, E. M.	H., Jr. Watertown Britton L. Sioux Falls E. Rapid City Redfield E. Lead Brookings Belle Fourche Rapid City Rapid City Rapid City Wess. Springs Colton Mitchel A. Mitchel Spencer Canistote M.M. Rapid City T. Sioux Falls L. Sioux Falls E. Sioux Falls E. Sioux Falls E. Sioux Falls Colton Aberdeer Sioux Falls Sioux Falls Sioux Falls Sioux Falls Estelline Sioux Falls Sioux Falls Sioux Falls Sioux Falls L. Sioux Falls Sioux Falls Sioux Falls Sioux Falls Sioux Falls Vermillior Vermillior Dupree
Driver, D. R.	Sioux Falls
Drobinsky M	Estalling
Diodiisky, M.	Totaline
Duimstra, F.	Sloux Falls
Dulaney, C. H	. Ft. Meade
Dovids I C	Colton
Devick, J. C.	COITOI
Eckrich, J. A.	Aberdeen
Eggers M W	Sioux Falls
Finish and T	Cierra Fell
Ellinberg, I.	Sloux Falls
*Elward, L. R	Dolar
Erickson E	Siouv Falls
E	Tr :11:
Lyres, T. E	Vermillion
Ehik. G	Dupree
Fairbanks W	H Vormillion
ranbanks, w.	TI VEIIIIIIOI
Farrell, H. W.	Sloux Falls
*Farrell, W. D). Aberdeer
Fodt Donald	Waterterr
Fedt, Donald	Watertown
Fedt, Donald Feehan, J. J.	Watertown
Fedt, Donald Feehan, J. J. Fershing, J.	Watertown Rapid City
Fedt, Donald Feehan, J. J. Fershing, J	Watertown Rapid City Bryan
Fedt, Donald Feehan, J. J. Fershing, J Fisk, R. G	Watertown Rapid City Bryan Dell Rapids
Fedt, Donald Feehan, J. J. Fershing, J Fisk, R. G Fisk, R. R	Watertowr Rapid City Bryant Dell Rapids Flandreau
Fedt, Donald Feehan, J. J. Fershing, J Fisk, R. G Fisk, R. R *Fleeger, R. F	Watertown Rapid City Bryan Dell Rapids Flandreau Leac
Fedt, Donald Feehan, J. J. Fershing, J. Fisk, R. G. Fisk, R. R. *Fleeger, R. F	Watertowr Rapid City Bryan Dell Rapids Flandreau 3. Lead
Fedt, Donald Feehan, J. J. Fershing, J. Fisk, R. G. Fisk, R. R. *Fleeger, R. Flynn, E.	Watertown Rapid City Bryam Dell Rapids Flandreau 3. Lead Pickstown
Fedt, Donald Feehan, J. J. Fershing, J Fisk, R. G Fisk, R. R. *Fleeger, R. Flynn, E Foley, R. J	Watertown Rapid City Bryan Dell Rapids Flandrea Lead Pickstown Tyndal
Fedt, Donald Feehan, J. J. Fershing, J. Fisk, R. G. Fisk, R. R. *Fleeger, R. I Flynn, E. Foley, R. J. Forster, K. M	Watertown Rapid City Bryan Dell Rapids Flandreau 3. Lead Pickstown Tyndal
Fedt, Donald Feehan, J. J. Fershing, J Fisk, R. G. Fisk, R. R *Fleeger, R. Flynn, E. Foley, R. J Forster, K. M	Watertown Rapid City Bryan Dell Rapids Flandreau I Lead Pickstown Tyndal Tyndal
Fedt, Donald Feehan, J. J. Fershing, J. Fisk, R. G. *Fleeger, R. F Flynn, E. Foley, R. J. Forster, K. M Fox, S. W.	Watertown Rapid City Bryan Dell Rapids Flandreau 3. Lead Pickstown Tyndal Tyndal Pierre
Fedt, Donald Feehan, J. J. Fershing, J. Fisk, R. G. Fisk, R. R. *Fleeger, R. Flynn, E. Foley, R. J. Forster, K. M Fox, S. W. Friefeld, S.	Watertown Rapid City Bryan Dell Rapids Flandreau B. Lead Pickstown Tyndal Pierre Brookings
Fedt, Donald Feehan, J. J. Fershing, J. Fisk, R. G. Fisk, R. R. *Fleeger, R. F Flynn, E. Foley, R. J. Forster, K. M Fox, S. W. Friefeld, S. Forrest, R. L.	Watertown Rapid City Bryan Dell Rapids Flandreau I Lead Pickstown Tyndal Tyndal Pierre Brookings
Fedt, Donald Feehan, J. J. Fershing, J. Fisk, R. G. *Fleeger, R. I Flynn, E. Foley, R. J. Forster, K. M Fox, S. W. Friefeld, S. Forrest, R. L.	Watertown Rapid City Bryan Dell Rapids Flandreau 3. Lead Pickstown Tyndal Tyndal Pierre Brookings Sioux Falls
Fedt, Donald Feehan, J. J. Fershing, J. Fisk, R. G. Fisk, R. R. *Fleeger, R. Flynn, E. Foley, R. J. Forster, K. M. Fox, S. W. Friefeld, S. Forrest, R. L. *Gage, E. E.	Watertown Rapid City Bryam Dell Rapids Flandreau B. Lead Pickstown Tyndal Pierre Brookings Sioux Falls
Fedt, Donald Feehan, J. J. Fershing, J. Fisk, R. G. *Fleeger, R. F Flynn, E. Foley, R. J. Forster, K. M Fox, S. W. Friefeld, S. Forrest, R. L. *Gage, E. E. Gargas, B. R.	Watertown Rapid City Bryan Dell Rapids Flandreau I Lead Pickstown Tyndal Pierre Brookings Sioux Falls Sioux Falls
Fedt, Donald Feehan, J. J. Fershing, J. Fisk, R. G. *Fleeger, R. I Flynn, E. Foley, R. J. Forster, K. M Fox, S. W. Friefeld, S. Forrest, R. L. *Gage, E. E. Gargas, B. R. Geib, W. A.	Watertown Rapid City Bryan Dell Rapids Flandreau Brickstown Tyndal Pierre Brookings Sioux Falls Sioux Falls Rapid City
Fedt, Donald Feehan, J. J. Fershing, J Fisk, R. G Fisk, R. R *Fleeger, R. I. Foley, R. J Forster, K. M. Fox, S. W. Friefeld, S. Forrest, R. L. *Gage, E. E. Gargas, B. R. Geib, W. A.	Watertown Rapid City Bryan Dell Rapids Flandreau B. Lead Pickstown Tyndal Pierre Brookings Sioux Falls Sioux Falls Rapid City Abardon
Fedt, Donald Feehan, J. J. Fershing, J. Fisk, R. G. *Fleeger, R. I. Flynn, E. Foley, R. J. Forster, K. M Fox, S. W. Friefeld, S. Forrest, R. L. *Gage, E. E. Gargas, B. R. Gelber, M. R.	Watertown Rapid City Bryan Dell Rapids Flandreau 3. Lead Pickstown Tyndal Pierre Brookings Sioux Falls Sioux Falls Rapid City Aberdeen
Fedt, Donald Feehan, J. J. Fershing, J. Fisk, R. G. Fisk, R. R. *Fleeger, R. F Flynn, E. Foley, R. J. Forster, K. M Fox, S. W. Friefeld, S. Forrest, R. L. *Gage, E. E. Gargas, B. R. Geib, W. A. Gelber, M. R.	Watertown Rapid City Bryan Dell Rapids Flandreau B. Lead Pickstown Tyndal Pierre Brookings Sioux Falls Sioux Falls Rapid City Aberdeen
Fedt, Donald Feehan, J. J. Fershing, J. Fisk, R. G. Fisk, R. R. *Fleeger, R. I Flynn, E. Forster, K. M Fox, S. W. Friefeld, S. Forrest, R. L. *Gage, E. E. Gargas, B. R. Geib, W. A. Gelber, M. R. *George, W. A	Vermillion Dupree H. Vermillion Sioux Falls Aberdeen Watertown Rapid City Bryam Dell Rapids Flandreau B. Lead Pickstown Tyndal Pierre Brookings Sioux Falls Sioux Falls Rapid City Aberdeen Selby
Fedt, Donald Feehan, J. J. Fershing, J. Fisk, R. G. *Fleeger, R. I. *Fleeger, R. I. Forster, K. M Fox, S. W. Friefeld, S. Forrest, R. L. *Gage, E. E. Gargas, B. R. Geib, W. A. Gelber, M. R. *George, W. A. Giebink, R. R.	Watertown Rapid City Bryan Dell Rapids Flandreau I Lead Pickstown Tyndal Pierre Brookings Sioux Falls Sioux Falls Rapid City Aberdeen Selby Sioux Falls Rapid City Aberdeen Selby Sioux Falls Rapid City
Fedt, Donald Feehan, J. J. Fershing, J. Fisk, R. G. *Fleeger, R. F Flynn, E. Forester, K. M Fox, S. W. Friefeld, S. Forrest, R. L. *Gage, E. E. Gargas, B. R. Geiber, M. R. *George, W. A Giebink, R. R.	Watertown Rapid City Bryan Dell Rapids Flandreau I Lead Pickstown Tyndal Pierre Brookings Sioux Falls Sioux Falls Rapid City Aberdeen Selby Sioux Falls Rapid Falls Brookings Rapid City Aberdeen Selby Belle Fourche
Fedt, Donald Feehan, J. J. Fershing, J. Fisk, R. G. Fisk, R. R. *Fleeger, R. I Flynn, E. Forster, K. M Fox, S. W. Friefeld, S. Forrest, R. L. *Gage, E. E. Gargas, B. R. Geib, W. A. Gelber, M. R. *George, W. A Giebink, R. R. Gilbert, F. J. Gillis, F. D.	Watertown Rapid City Bryan Dell Rapids Flandreau 3. Lead Pickstown Tyndal Pierre Brookings Sioux Falls Sioux Falls Sioux Falls City Aberdeen Selby Sioux Falls Belle Fourche
Fedt, Donald Feehan, J. J. Fershing, J. Fisk, R. G. Fisk, R. R. *Fleeger, R. F Flynn, E. Foley, R. J. Forster, K. M Fox, S. W. Friefeld, S. Forrest, R. L. *Gage, E. E. Gargas, B. R. Geib, W. A. Gelber, M. R. *George, W. A Gibert, F. J. Gillis, F. D. Gillis, F. D. Gillis, F. D.	Watertown Rapid City Bryan Dell Rapids Flandreau Brickstown Tyndal Pierre Brookings Sioux Falls Sioux Falls Rapid City Aberdeen Selby Sioux Falls Belle Fourche Br. Mitchel
Fedt, Donald Feehan, J. J. Fershing, J. Fisk, R. G. Fisk, R. R. *Fleeger, R. I Flynn, E. Forster, K. M Fox, S. W. Friefeld, S. Forrest, R. L. *Gage, E. E. Gargas, B. R. Geiber, M. A. Gelber, M. R. *George, W. A Gilbert, F. J. Gillis, F. D., Gillis, F. D.,	Watertown Rapid City Bryan Dell Rapids Flandreau Brickstown Tyndal Pierre Brookings Sioux Falls Sioux Falls Rapid City Aberdeen Selby Sioux Falls Rapid City Aberdeen Selby Sioux Falls Rapid City Aberdeen Mitchel Jr. Mitchel
Fedt, Donald Feehan, J. J. Fershing, J. Fisk, R. G. Fisk, R. R. *Fleeger, R. F Flynn, E. Foley, R. J. Forster, K. M Fox, S. W. Friefeld, S. Forrest, R. L. *Gage, E. E. Gargas, B. R. Geib, W. A. Gelber, M. R. *George, W. A Giebink, R. R. Gilbert, F. J. Gillis, F. D., Glood, D.	Watertown Rapid City Bryan Dell Rapids Flandreau S. Lead Pickstown Tyndal Pierre Brookings Sioux Falls Sioux Falls Sioux Falls Rapid City Aberdeen Selby Sioux Falls Rapid City Aberdeen Selby Mitchel Jr. Mitchel Viborg
Fedt, Donald Feehan, J. J. Fershing, J. Fisk, R. G. Fisk, R. R. *Fleeger, R. Flynn, E. Forster, K. M Fox, S. W. Friefeld, S. Forrest, R. L. *Gage, E. E. Gargas, B. R. Geib, W. A. Gelber, M. R. *George, W. A. Gilbert, F. J. Gillis, F. D., Gillis, F. D., Golood, D. Gorder, Wm.	Watertown Rapid City Bryan Dell Rapids Flandreau Brickstown Tyndal Pierre Brookings Sioux Falls Sioux Falls Rapid City Aberdeen Sioux Falls Rapid City Aberdeen Brourche Mitchel Fourche Aberdeen Viborg Aberdeen
Fedt, Donald Feehan, J. J. Fershing, J. Fershing, J. Fisk, R. G. Fisk, R. R. *Fleeger, R. I. Flynn, E. Foley, R. J. Forster, K. M Fox, S. W. Friefeld, S. Forrest, R. L. *Gage, E. E. Gargas, B. R. Geib, W. A. Gelber, M. R. *George, W. A. Gilbis, F. D., Gillis, F. D., Gillis, F. D., Gorder, Wm. Graff, L. W. Graff, L. W. Graff, L. W.	Watertown Rapid City Bryan Dell Rapids Flandreau S. Lead Pickstown Tyndal Pierre Brookings Sioux Falls Sioux Falls Sioux Falls Sioux Falls Sioux Falls Fapid City Aberdeen Selby Sioux Falls Belle Fourche Sr. Mitchel Ur. Mitchel Viborg Aberdeen Britter
Fedt, Donald Feehan, J. J. Fershing, J. Frisk, R. G. Fisk, R. R. *Fleeger, R. Flynn, E. Foley, R. J. Forster, K. M. Fox, S. W. Friefeld, S. Forrest, R. L. *Gage, E. E. Gargas, B. R. Geib, W. A. Gelber, M. R. *George, W. A. Giebink, R. R. Gillis, F. D., G. Gillis, F. D., G. Gillis, F. D., G. Gorder, Wm. Graff, L. W. Graff, L. W. Gray, H. J. Fershing, J. Gray, H. J. Gray, J. J. G. Gray, H. J. Gray, H.	Watertown Rapid City Bryan Dell Rapids Flandreau Rapids Flandreau Leac Pickstown Tyndal Pierre Brookings Sioux Falls Sioux Falls Rapid City Aberdeen Selby Sioux Falls Belle Fourche Ur. Mitchel Viborg Aberdeen Brittor
Fedt, Donald Feehan, J. J. Fershing, J. Frisk, R. G. Fisk, R. R. *Fleeger, R. Flynn, E. Forster, K. M Fox, S. W. Friefeld, S. Forrest, R. L. *Gage, E. E. Gargas, B. R. Geib, W. A. Gelber, M. R. *George, W. A. Gibert, F. J. Gillis, F. D., Gillis, F. D., Golod, D. Gorder, Wm. Graff, L. W. Grau, H. J. Grau, H. J. Grau, H. J. Grau, H. J. Graving J. Fisher, J. Grau, H. J. Graving J. Fisher, J. Grau, H. J. Grau, Graph Grap	Watertown Rapid City Bryan Dell Rapids Flandreau S. Lead Pickstown Tyndal Pierre Brookings Sioux Falls Sioux Falls Rapid City Aberdeen Selby Sioux Falls Rapid City Aberdeen Britchel Jr. Mitchel Jr. Mitchel Jr. Aberdeen Rapid City Rapid City
Fedt, Donald Feehan, J. J. Fershing, J. Fisk, R. G. Fisk, R. R. *Fleeger, R. F Flynn, E. Foley, R. J. Forster, K. M Fox, S. W. Friefeld, S. Forrest, R. L. *Gage, E. E. Gargas, B. R. Geib, W. A. Gelber, M. R. *George, W. A Giebink, R. R. Gilbert, F. J. Gillis, F. D., G Gillis, F. D., G Gorder, Wm Graff, L. W. Grau, H. J. Green, C. D.	Watertown Rapid City Bryan Dell Rapids Flandreau S. Lead Pickstown Tyndal Pierre Brookings Sioux Falls Sioux Falls Sioux Falls Rapid City Aberdeen Selby Sioux Falls Rapid City Aberdeen Selby Sioux Falls Rapid City Aberdeen Selby Rapid City Aberdeen Selby Rapid City Aberdeen Selby Rapid City Aberdeen Rapid City Aberdeen Selby Rapid City Aberdeen Rapid City Aberdeen Britton
Fedt, Donald Feehan, J. J. Fershing, J. Frisk, R. G. Fisk, R. R. *Fleeger, R. Flynn, E. Forster, K. M. Friefeld, S. Forrest, R. L. *Gage, E. E. Gargas, B. R. Geib, W. A. Gelber, M. R. *George, W. A. Gibbink, R. R. Gilbert, F. J. Gillis, F. D., Gillis, F. D., Gorder, Wm. Graff, L. W. Grau, H. J. Green, C. D. Green, R. D.	Watertown Rapid City Bryan Dell Rapids Flandreau Brickstown Tyndal Pierre Brookings Sioux Falls Sioux Falls Rapid City Aberdeen Selby Sioux Falls Belle Fourche Fr. Mitchel Jr. Mitchel Jr. Aberdeen Britton Rapid City Aberdeen France Britton Rapid City Parket
Gilbert, F. J. Gillis, F. D., S Gillis, F. D., G Glood, D. Gorder, Wm. Graff, L. W. Grau, H. J. Green, C. D. Green, R. D.	Belle Fourche Sr. Mitchel Ir. Mitchel Viborg Aberdeer Brittor Rapid City Parket
Gilbert, F. J. Gillis, F. D., S Gillis, F. D., G Glood, D. Gorder, Wm. Graff, L. W. Grau, H. J. Green, C. D. Green, R. D.	Belle Fourche Sr. Mitchel Ir. Mitchel Viborg Aberdeer Brittor Rapid City Parket
Gilbert, F. J. Gillis, F. D., S Gillis, F. D., G Glood, D. Gorder, Wm. Graff, L. W. Grau, H. J. Green, C. D. Green, R. D.	Belle Fourche Sr. Mitchel Ir. Mitchel Viborg Aberdeer Brittor Rapid City Parket
Gilbert, F. J. Gillis, F. D., S Gillis, F. D., G Glood, D. Gorder, Wm. Graff, L. W. Grau, H. J. Green, C. D. Green, R. D.	Belle Fourche Sr. Mitchel Ir. Mitchel Viborg Aberdeer Brittor Rapid City Parket
Gilbert, F. J. Gillis, F. D., S Gillis, F. D., G Glood, D. Gorder, Wm. Graff, L. W. Grau, H. J. Green, C. D. Green, R. D.	Belle Fourche Sr. Mitchel Ir. Mitchel Viborg Aberdeer Brittor Rapid City Parket
Gilbert, F. J. Gillis, F. D., S Gillis, F. D., G Glood, D. Gorder, Wm. Graff, L. W. Grau, H. J. Green, C. D. Green, R. D.	Belle Fourche Sr. Mitchel Ir. Mitchel Viborg Aberdeer Brittor Rapid City Parket
Gilbert, F. J. Gillis, F. D., S Gillis, F. D., G Glood, D. Gorder, Wm. Graff, L. W. Grau, H. J. Green, C. D. Green, R. D.	Belle Fourche Sr. Mitchel Ir. Mitchel Viborg Aberdeer Brittor Rapid City Parket
Gilbert, F. J. Gillis, F. D., S Gillis, F. D., G Glood, D. Gorder, Wm. Graff, L. W. Grau, H. J. Green, C. D. Green, R. D.	Belle Fourche Sr. Mitchel Ir. Mitchel Viborg Aberdeer Brittor Rapid City Parket
Gilbert, F. J. Gillis, F. D., S Gillis, F. D., G Glood, D. Gorder, Wm. Graff, L. W. Grau, H. J. Green, C. D. Green, R. D.	Belle Fourche Sr. Mitchel Ir. Mitchel Viborg Aberdeer Brittor Rapid City Parket
Gilbert, F. J. Gillis, F. D., S Gillis, F. D., G Glood, D. Gorder, Wm. Graff, L. W. Grau, H. J. Green, C. D. Green, R. D.	Belle Fourche Sr. Mitchel Ir. Mitchel Viborg Aberdeer Brittor Rapid City Parket
Gilbert, F. J. Gillis, F. D., S Gillis, F. D., G Glood, D. Gorder, Wm. Graff, L. W. Grau, H. J. Green, C. D. Green, R. D.	Belle Fourche Sr. Mitchel Ir. Mitchel Viborg Aberdeer Brittor Rapid City Parket
Gilbert, F. J. Gillis, F. D., S Gillis, F. D., G Glood, D. Gorder, Wm. Graff, L. W. Grau, H. J. Green, C. D. Green, R. D.	Belle Fourche Sr. Mitchel Ir. Mitchel Viborg Aberdeer Brittor Rapid City Parket
Gilbert, F. J. Gillis, F. D., S Gillis, F. D., G Glood, D. Gorder, Wm. Graff, L. W. Grau, H. J. Green, C. D. Green, R. D.	Belle Fourche Sr. Mitchel Ir. Mitchel Viborg Aberdeer Brittor Rapid City Parket
Gilbert, F. J. Gillis, F. D., S Gillis, F. D., G Glood, D. Gorder, Wm. Graff, L. W. Grau, H. J. Green, C. D. Green, R. D.	Watertown Rapid City Bryan Dell Rapids Flandreau Brickstown Tyndal Pierre Brookings Sioux Falls Sioux Falls Rapid City Aberdeen Selby Sioux Falls Belle Fourche Sr. Mitchel Jr. Mitchel Jr. Wiborg Aberdeen Britton Rapid City Parken Sioux Falls Fand City Aberdeen Britton Rapid City Parken Sioux Falls Fand City Parken Sioux Falls Fand City Parken Sioux Falls Brookings Huror

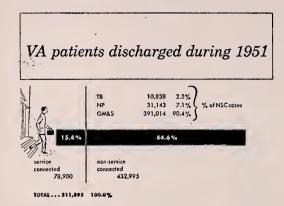
Grover, W. W	Yankton
Hass, F. W	Yankton
Hagan, A. S.	Faulkton
Hage, W	Sioux Falls
Hagin, J. C.	Miller
Hamm, J. N.	Sturgis
Hansen, H. F.	Sloux Falls
Hans Ila	Rapid City
*Howling A D	Wouhow
Haves R H	Winner
*Heineman A A	Wasta
Henry, Robt.	Brookings
Hesz. A. B	Hill City
*Hickman, G. L	Bryant
Hieb, W. E	Marion
Hill, J. F	Yankton
Hofer, E. A.	Huron
THONI, J. A.	Yankton
Hohm, Paul	Huron
Holland I. W	Chambarlain
Holleman W W	Rapid City
Honke, R. W.	Wagner
Horthy. A.	Kennebec
Horthy, K.	Kennebec
Hoskins, J. H.	Sioux Falls
Howard, I. R.	Huron
Howe, F. S	Deadwood
*Hoyne, A. H	Salem
Hubner, R. F.	Yankton
*Hummer, H. R	Sloux Falls
Hura, R	Lagle Butte
Hyam Ola	riandreau
Hyden Anton	Sioux Falls
Thle C W	Sioux Falls
*Jackson, A. S.	Lead
*Jackson, E. B	Aberdeen
*Jackson, R. J	Rapid City
Jacobson, T. F.	Hot Springs
Jacoby, Hans	Huron
*Jacotel, J. A	Milbank
Jahraus, R. C.	Pierre
Janis, J. B	Bonid City
Jernstrom, Roy E.	Lommon
Johnson C F	Vankton
Jones, W. E.	Sturgis
Jones, W. L.	Sioux Falls
Jordan, G. T	Vermillion
*Joyce, E	Hurley
Janavs, V.	Willow Lake
Karlins, W. H	Webster
*Keegan, Agnes	Aberdeen
*Keene, F. F.	Wess. Springs
Kegaries, D. L.	Rapid City
Keiler, S. A.	Sloux Falls
Keisey, F. O.	vermillion
Kemper, C. E	Viborg
Vershoon C. M.	watertown
Kershner, C. M	Wetertewn
Kilpatrick R W I	Watertown
King R F	A hardean
King L. Jr	Sioux Falls
King Owen	Aherdeen
Kittelson, H. O.	Sioux Falls
Kittelson, J. A.	Sioux Falls
Knowles, R. C.	Sioux Falls
Kobza, V. V.	Rapid City
Grover, W. W. Hass, F. W. Hagan, A. S. Hage, W. Hagin, J. C. Hamm, J. N. Hansen, H. F. Hare, H. J. Hare, Lyle *Hawkins, A. P. Hayes, R. H. *Heineman, A. A. Henry, Robt. Hesz, A. B. *Hickman, G. L. Hieb, W. E. Hill, J. F. Hofer, E. A. *Hohm, Paul Hohm, Theo. Holland, L. W. Holleman, W. W. Horthy, A. Horthy, A. Horthy, K. Hoskins, J. H. Howard, I. R. Hubner, R. F. *Hummer, H. R. Hura, R. Hurewitz, M. Hvam, Ole Hyden, Anton Ihle, C. W. *Jackson, R. J. Jackson, E. B. *Jackson, R. J. Jackson, T. F. Jacoby, Hans *Jacotel, J. A. Jahraus, R. C. Janis, J. B. Jernstrom, Roy E. Jestadt, J. J., M.M Johnson, C. F. Jones, W. L. Jordan, G. T. *Joyce, E. Janavs, V. Karlins, W. H. *Keegan, Agnes *Keene, F. F. Kegaries, D. L. Keller, S. A. Kelsey, F. O. Kenney, H. T. Kershner, C. M. Kilgard, R. M. Kilpatrick, R. W. J King, B. F. Kenney, H. T. Kershner, C. M. Kilgard, R. M. Kilpatrick, R. W. J King, B. F. King, Owen Kittelson, H. O. Kittelson, H. O. Kittelson, J. A. Knowles, R. C. Kobla, V. V. Kohlmeyer, P. C. Kohl, B. A. Krowles, R. C. Kobla, V. V. Kohlmeyer, P. C. Kohl, B. A. Koren, Paul Lakstigala, P.	Sioux Falls
Kolp, B. A	Volga
Koren, Paul	Rapid City
Lakstigala, P	White River

Lamb, H.	
T A A	. Sioux Falls
Lampert, A. A	Rapid City
Larsen, M. W.	Watertown
Larson C S	Siouv Falls
Leeds I F	Hot Springs
Leigh F D	Huran
Leight, F. D.	Danid Cit-
Leinley, R. E.	Kapia City
Lenz, B. T.	Huron
Leraan, L. B.	_ Sioux Falls
Liebert, M.	Yankton
Lietzke, E. T.	Beresford
Lillard, R. L.	Burke
Livingston, R. F.	Yankton
Llovd. J. H.	Mitchell
Logan R W	Missouri
Lovering I	Wohstor
Low I.	T oppos
Low, L.	Lennox
Lowe, C. E.	Wobriage
Lowe, H. E.	Mobridge
Lowe, J. A	Mobridge
Lyso, M.	Yankton
Mabee, D. R.	Mitchell
Mabee, O. J.	Mitchell
Maclean, D. W.	Sioux Falls
*Magee, W. G.	Watertown
Magsdick, C. C.	Siony Falls
Maresh E R	Sioux Falls
Martin H P	LI1
Martyn W E MAN	narroid
Magland D. C.	Aberdeen
Masiana, R. C.	Yankton
Mattox, J. E.	Deadwood
Mattox, N. E.	Deadwood
Maxwell, R. T.	Clear Lake
Mayer, R. G	Aberdeen
Meade, T.	Spearfish
Merryman M P	Rapid City
Meyer W I.	- Rapid City
*Miller C H	Sanator
Mills C W	Spearfish
Mitch-II C D	Wall
Marile D. B.	Sioux Falls
Monk, R.	Yankton
Moore, E. J.	Vermillion
Moran, C. S	Mitchell
	D'
Morrissey, M.M.	Pierre
Morrissey, M.M *Morse, W. E.	Rapid City
Morrissey, M.M. *Morse, W. E. Morsman, C. F.	Rapid City
Morrissey, M.M. *Morse, W. E. Morsman, C. F. Muggly, J. A	Rapid City Hot Springs
Morrissey, M.M. *Morse, W. E. Morsman, C. F. Muggly, J. A. Munson, H. B.	Rapid City Hot Springs Madison
Morrissey, M.M. *Morse, W. E. Morsman, C. F. Muggly, J. A. Munson, H. B.	Rapid City Hot Springs Madison Rapid City
Morrissey, M.M. *Morse, W. E. Morsman, C. F. Muggly, J. A. Munson, H. B. Murdy, B. C.	Rapid City Hot Springs Madison Rapid City Aberdeen
Morrissey, M.M. *Morse, W. E. Morsman, C. F. Muggly, J. A. Munson, H. B. Murdy, B. C. Murdy, C. B.	Rapid City Hot Springs Madison Rapid City Aberdeen Aberdeen
Morrissey, M.M. *Morse, W. E. Morsman, C. F. Muggly, J. A. Munson, H. B. Murdy, B. C. Murdy, C. B. Murdy, R. C.	Rapid City Hot Springs Madison Rapid City Aberdeen Aberdeen Aberdeen
Morrissey, M.M. *Morse, W. E. Morsman, C. F. Muggly, J. A. Munson, H. B. Murdy, B. C. Murdy, C. B. Murdy, R. C. Murphy, J. C.	Rapid City Hot Springs Madison Rapid City Aberdeen Aberdeen Aberdeen Murdo
Morrissey, M.M. *Morse, W. E. Morsman, C. F. Muggly, J. A. Munson, H. B. Murdy, B. C. Murdy, C. B. Murdy, R. C. Murphy, J. C. Myrabo, A. K.	Rapid City Hot Springs Madison Rapid City Aberdeen Aberdeen Aberdeen Murdo Sioux Falls
Morrissey, M.M. *Morse, W. E. Morsman, C. F. Muggly, J. A. Munson, H. B. Murdy, B. C. Murdy, C. B. Murdy, R. C. Murdy, R. C. Murphy, J. C. Myrabo, A. K. McCarthy, P. V.	Rapid City Hot Springs Madison Rapid City Aberdeen Aberdeen Aberdeen Murdo Sioux Falls Aberdeen Aberdeen
Morrissey, M.M. *Morse, W. E. Morsman, C. F. Muggly, J. A. Munson, H. B. Murdy, B. C. Murdy, C. B. Murdy, R. C. Murdy, J. C. Murphy, J. C. Myrabo, A. K. McCarthy, P. V. McCroskey, R. C.	Rapid City Hot Springs Madison Rapid City Aberdeen Aberdeen Murdo Sioux Falls Aberdeen Rapid City
Morrissey, M.M. *Morse, W. E. Morsman, C. F. Muggly, J. A. Munson, H. B. Murdy, B. C. Murdy, C. B. Murdy, R. C. Murphy, J. C. Myrabo, A. K. McCarthy, P. V. McCroskey, R. C. McDonald, C. J.	Rapid City Hot Springs Madison Rapid City Aberdeen Aberdeen Murdo Sioux Falls Rapid City
Morrissey, M.M. *Morse, W. E. Morsman, C. F. Muggly, J. A. Munson, H. B. Murdy, B. C. Murdy, C. B. Murdy, R. C. Murphy, J. C. Myrabo, A. K. McCarthy, P. V. McCroskey, R. C. McDonald, C. J. McGreevy, E. J. W.	Rapid City Hot Springs Madison Rapid City Aberdeen Aberdeen Murdo Sioux Falls Aberdeen Rapid City
Morrissey, M.M. *Morse, W. E. Morsman, C. F. Muggly, J. A. Munson, H. B. Murdy, B. C. Murdy, C. B. Murdy, R. C. Murphy, J. C. Myrabo, A. K. McCarthy, P. V. McCroskey, R. C. McDonald, C. J. McGreevy, E. J., M.	Rapid City Hot Springs Madison Rapid City Aberdeen Aberdeen Murdo Sioux Falls Aberdeen Rapid City Sioux Falls
Lamb, H. Lampert, A. A. Larsen, M. W. Larson, C. S. Leeds, J. F. Leigh, F. D. Lemley, R. E. Lenz, B. T. Leraan, L. B. Liebert, M. Lietzke, E. T. Lillard, R. L. Livingston, R. F. Lloyd, J. H. Loogan, R. W. Lovering, J. Low, L. Lowe, C. E. Lowe, H. E. Lowe, J. A. Lyso, M. Mabee, D. R. Mabee, O. J. Maclean, D. W. *Magee, W. G. Maresh, E. R. Martin, H. B. Martyn, W. E., M.M Masland, R. C. Mattox, J. E. Mattox, N. E. Maxwell, R. T. Mayer, R. G. Meade, T. Merryman, M. P. Meyer, W. L. *Miller, G. H. Mills, G. W. Mitchell, C. B. Monk, R. Moore, E. J. Moran, C. S. Morrissey, M.M. *Morse, W. E. Morsman, C. F. Muggly, J. A. Munson, H. B. Murdy, B. C. Murdy, R. C. McCarthy, P. V. McCroskey, R. C. McDonald, C. J. McGreevy, E. J., M	Rapid City Hot Springs Madison Rapid City Aberdeen Aberdeen Murdo Sioux Falls Aberdeen Aberdeen Murdo Sioux Falls LM. Sioux Falls
Morrissey, M.M. *Morse, W. E. Morsman, C. F. Muggly, J. A. Munson, H. B. Murdy, B. C. Murdy, R. C. Murphy, J. C. Myrabo, A. K. McCarthy, P. V. McCroskey, R. C. McDonald, C. J. McGreevy, E. J., M. McGreevy, J. V.	Rapid City Hot Springs Madison Rapid City Aberdeen Aberdeen Aberdeen Sioux Falls Aberdeen Rapid City City Aberdeen Murdo Sioux Falls Aberdeen Rapid City Sioux Falls I.M. Sioux Falls
Morrissey, M.M. *Morse, W. E. Morsman, C. F. Muggly, J. A. Munson, H. B. Murdy, B. C. Murdy, C. B. Murdy, R. C. Murphy, J. C. Myrabo, A. K. McCarthy, P. V. McCroskey, R. C. McDonald, C. J. McGreevy, E. J., M. McGreevy, J. V. McIntosh, G. F.	Rapid City Hot Springs Madison Rapid City Aberdeen Aberdeen Murdo Sioux Falls Aberdeen Rapid City Sioux Falls Murdo Sioux Falls Murdo Sioux Falls LM. Sioux Falls LM. Sioux Falls
Morrissey, M.M. *Morse, W. E. Morsman, C. F. Muggly, J. A. Munson, H. B. Murdy, B. C. Murdy, C. B. Murdy, R. C. Murphy, J. C. Myrabo, A. K. McCarthy, P. V. McCroskey, R. C. McDonald, C. J. McGreevy, E. J., M. McGreevy, J. V. McIntosh, G. F. McManus, T. B.	Rapid City Hot Springs Madison Rapid City Aberdeen Aberdeen Murdo Sioux Falls Aberdeen Rapid City Sioux Falls LM Sioux Falls Sioux Falls LM Sioux Falls Sioux Falls Sioux Falls
Morrissey, M.M. *Morse, W. E. Morsman, C. F. Muggly, J. A. Munson, H. B. Murdy, B. C. Murdy, C. B. Murdy, R. C. Murphy, J. C. Myrabo, A. K. McCarthy, P. V. McCroskey, R. C. McDonald, C. J. McGreevy, E. J., M. McGreevy, J. V. McIntosh, G. F. McManus, T. B. V. McVay, C. B.	Rapid City Hot Springs Madison Rapid City Aberdeen Aberdeen Murdo Sioux Falls Aberdeen Rapid City Sioux Falls I.M. Sioux Falls L.M. Sioux Falls
Morrissey, M.M. *Morse, W. E. Morsman, C. F. Muggly, J. A. Munson, H. B. Murdy, B. C. Murdy, C. B. Murdy, R. C. Murphy, J. C. Myrabo, A. K. McCarthy, P. V. McCroskey, R. C. McDonald, C. J. McGreevy, E. J., M McGreevy, J. V. McIntosh, G. F. McManus, T. B. McVay, C. B. Nolan, B. P.	Rapid City Hot Springs Madison Rapid City Aberdeen Aberdeen Aberdeen Sioux Falls Aberdeen Rapid City Sioux Falls LM. Sioux Falls LM. Sioux Falls Eureka Wess. Springs Yankton
McGreevy, J. V. McIntosh, G. F. McManus, T. B. J. McVay, C. B. Nolan, B. P. Nammings, S. F.	Sioux Falls Sioux Falls Eureka Wess. Springs Yankton Mobridge
McGreevy, J. V. McIntosh, G. F. McManus, T. B. J. McVay, C. B. Nolan, B. P. Nammings, S. F.	Sioux Falls Sioux Falls Eureka Wess. Springs Yankton Mobridge
McGreevy, J. V. McIntosh, G. F. McManus, T. B. J. McVay, C. B. Nolan, B. P. Nammings, S. F.	Sioux Falls Sioux Falls Eureka Wess. Springs Yankton Mobridge
McGreevy, J. V. McIntosh, G. F. McManus, T. B. J. McVay, C. B. Nolan, B. P. Nammings, S. F.	Sioux Falls Sioux Falls Eureka Wess. Springs Yankton Mobridge
McGreevy, J. V. McIntosh, G. F. McManus, T. B. J. McVay, C. B. Nolan, B. P. Nammings, S. F.	Sioux Falls Sioux Falls Eureka Wess. Springs Yankton Mobridge
McGreevy, J. V. McIntosh, G. F. McManus, T. B. J. McVay, C. B. Nolan, B. P. Nammings, S. F.	Sioux Falls Sioux Falls Eureka Wess. Springs Yankton Mobridge
McGreevy, J. V. McIntosh, G. F. McManus, T. B. V. McVay, C. B. Nolan, B. P. Namminga, S. E. Neisius, F. Nelson, J. A. Nelson, L. A., M.M. Newby, H. D. Nilsson, F. C.	Sioux Falls Eureka Wess. Springs Yankton Mobridge Fort Meade Lead Sioux Falls Faulkton Rapid City
McGreevy, J. V. McIntosh, G. F. McManus, T. B. V. McVay, C. B. Nolan, B. P. Namminga, S. E. Neisius, F. Nelson, J. A. Nelson, L. A., M.M. Newby, H. D. Nilsson, F. C.	Sioux Falls Eureka Wess. Springs Yankton Mobridge Fort Meade Lead Sioux Falls Faulkton Rapid City
McGreevy, J. V. McIntosh, G. F. McManus, T. B. V. McVay, C. B. Nolan, B. P. Namminga, S. E. Neisius, F. Nelson, J. A. Nelson, L. A., M.M. Newby, H. D. Nilsson, F. C.	Sioux Falls Eureka Wess. Springs Yankton Mobridge Fort Meade Lead Sioux Falls Faulkton Rapid City
McGreevy, J. V. McIntosh, G. F. McManus, T. B. V. McVay, C. B. Nolan, B. P. Namminga, S. E. Neisius, F. Nelson, J. A. Nelson, L. A., M.M. Newby, H. D. Nilsson, F. C.	Sioux Falls Eureka Wess. Springs Yankton Mobridge Fort Meade Lead Sioux Falls Faulkton Rapid City
McGreevy, J. V. McIntosh, G. F. McManus, T. B. V. McVay, C. B. Nolan, B. P. Namminga, S. E. Neisius, F. Nelson, J. A. Nelson, L. A., M.M. Newby, H. D. Nilsson, F. C.	Sioux Falls Eureka Wess. Springs Yankton Mobridge Fort Meade Lead Sioux Falls Faulkton Rapid City
McGreevy, J. V. McIntosh, G. F. McManus, T. B. J. McVay, C. B. Nolan, B. P. Nammings, S. F.	Sioux Falls Eureka Wess. Springs Yankton Mobridge Fort Meade Lead Sioux Falls Faulkton Rapid City

Onheim W L	Sioux Falls
Onn D	Ciarra Falla
O11, n	Sloux Falls
Otey, B	Flandreau
O'Toole T F	Rapid City
O 1001c, 1. 1	Itapia City
Owen, G. S	Rapid City
*Owen. N. T.	Rapid City
Donghum M W	Millan
Pangburn, M. W.	willer
Pankow, L. J.	Sioux Falls
Dorleo T T	Conton
Farke, L. L	Canton
Patt. W. H	Brookings
Paulson C C	Panid City
rauson, G. S	Rapid City
Peeke, A. P	Volga
Pemberton M O	Ranid City
Deil D. T.	Itapia City
Peik, D. J	Sioux Falls
Peiner W	Mitchell
D. C. D. C. T. C.	Witchell
Perry, E. J	Redfield
Pfister F. F	Wehster
Dhillim - D W	TT 4 Costel
Pillips, R. K	not Springs
Pittenger, E. A.	Aberdeen
Dlawman E	D-oal-in ga
Flowman, E. I.	Drookings
Pollerman, T	Alexandria
Porter M	Darkston
D : tel, 1V1	I al KStOII
Price, Mary	Armour
Price Ronald	Armour
Di Tonaia	Almoul
Pokorny, J. F	
Quinn R H	Siony Falls
Ossissa D. T	Dioux Fails
Quinn, R. J	Burke
Radusch F J	Rapid City
Dandall O C	Trapia City
randan, O. S	watertown
Ranney, Brooks	Vankton
Panner T D	A h
Manney, I. F.	Aberdeen
Reagan, P. C.	Sioux Falls
Roogen P	Ciour Fall-
neagan, n	Sloux Falls
Reaney, D. B	Yankton
Roding A D	Marion
iteuing, A. F	Marion
Reul, T. W.	Waterterry
	Watertown
Rich E. L.	Sioux Falls
Rich, E. L.	Sioux Falls
Rich, E. L. Rieb, W. G.	Sioux Falls Parkston
Rich, E. L. Rieb, W. G.	Sioux Falls Parkston
Rich, E. L. Rieb, W. G. Riggs, T. F.	Sioux Falls Parkston Pierre
Rich, E. L. Rieb, W. G. Riggs, T. F. Rimsa, Alfreds	Sioux Falls Parkston Pierre Onida
Rich, E. L. Rieb, W. G. Riggs, T. F. Rimsa, Alfreds Riner, H. L.	Sioux Falls Parkston Pierre Onida
Rich, E. L. Rieb, W. G. Riggs, T. F. Rimsa, Alfreds Riner, H. L.	Sioux Falls Parkston Pierre Onida New Mexico
Rich, E. L. Rieb, W. G. Riggs, T. F. Rimsa, Alfreds Riner, H. L. *Robbins, C. E.	Sioux Falls Parkston Pierre Onida New Mexico Pierre
Rich, E. L. Rieb, W. G. Riggs, T. F. Rimsa, Alfreds Riner, H. L. *Robbins, C. E. Roberts, C. S., Jr.	Sioux Falls Parkston Pierre Onida New Mexico Pierre Lake Preston
Rich, E. L. Rieb, W. G. Riggs, T. F. Rimsa, Alfreds Riner, H. L. *Robbins, C. E. Roberts, C. S., Jr.	Sioux Falls Parkston Pierre Onida New Mexico Pierre Lake Preston
Rich, E. L. Rieb, W. G. Riggs, T. F. Rimsa, Alfreds Riner, H. L. *Robbins, C. E. Roberts, C. S., Jr. Rodine, J. C.	Sioux Falls Parkston Pierre Onida New Mexico Pierre Lake Preston Aberdeen
Rich, E. L. Rieb, W. G. Riggs, T. F. Rimsa, Alfreds Riner, H. L. *Robbins, C. E. Roberts, C. S., Jr. Rodine, J. C. Roesel, R. W.	Sioux Falls Parkston Pierre Onida New Mexico Pierre Lake Preston Aberdeen Burke
Rich, E. L. Rieb, W. G. Riggs, T. F. Rimsa, Alfreds Riner, H. L. *Robbins, C. E. Roberts, C. S., Jr. Rodine, J. C. Roesel, R. W. Roper, C. E. M. M.	Sioux Falls Parkston Pierre Onida New Mexico Pierre Lake Preston Aberdeen Burke
Rich, E. L. Rieb, W. G. Riggs, T. F. Rimsa, Alfreds Riner, H. L. *Robbins, C. E. Roberts, C. S., Jr. Rodine, J. C. Roesel, R. W. Roper, C. E., M.W.	Sioux Falls Parkston Pierre Onida New Mexico Pierre Lake Preston Aberdeen Burke L. Hot Springs
Rich, E. L. Rieb, W. G. Riggs, T. F. Rimsa, Alfreds Riner, H. L. *Robbins, C. E. Roberts, C. S., Jr. Rodine, J. C. Roesel, R. W. Roper, C. E., M.M. Rosenberger, H.	Sioux Falls Parkston Pierre Onida New Mexico Pierre Lake Preston Aberdeen Burke L. Hot Springs P Aberdeen
Rich, E. L. Rieb, W. G. Riggs, T. F. Rimsa, Alfreds Riner, H. L. *Robbins, C. E. Roberts, C. S., Jr. Rodine, J. C. Roesel, R. W. Roper, C. E., M.M. Rosenberger, H. Rousseau. C.	Sioux Falls Parkston Pierre Onida New Mexico Pierre Lake Preston Aberdeen Burke L. Hot Springs P. Aberdeen Watertown
Rich, E. L. Rieb, W. G. Riggs, T. F. Rimsa, Alfreds Riner, H. L. *Robbins, C. E. Roberts, C. S., Jr. Rodine, J. C. Roesel, R. W. Roper, C. E., M.M. Rosenberger, H. Rousseau, C.	Sioux Falls Parkston Pierre Onida New Mexico Pierre Lake Preston Aberdeen Burke L. Hot Springs P. Aberdeen Waterdown
Rich, E. L. Rieb, W. G. Riggs, T. F. Rimsa, Alfreds Riner, H. L. *Robbins, C. E. Roberts, C. S., Jr. Rodine, J. C. Roesel, R. W. Roper, C. E., M.M. Rosenberger, H. Rousseau, C. Rudolph, E. A.	Sioux Falls Parkston Pierre Onida New Mexico Pierre Lake Preston Burke I. Hot Springs P. Aberdeen Watertown Aberdeen
Rich, E. L. Rieb, W. G. Riggs, T. F. Rimsa, Alfreds Riner, H. L. *Robbins, C. E. Roberts, C. S., Jr. Rodine, J. C. Roesel, R. W. Roper, C. E., M.M. Rosenberger, H. Rousseau, C. Rudolph, E. A. Rudolph, F. A.	Sioux Falls Parkston Pierre Onida New Mexico Pierre Lake Preston Aberdeen Burke L. Hot Springs P. Aberdeen Watertown Aberdeen Pennsylvania
Rich, E. L. Rieb, W. G. Riggs, T. F. Rimsa, Alfreds Riner, H. L. *Robbins, C. E. Roberts, C. S., Jr. Rodine, J. C. Roesel, R. W. Roper, C. E., M.M. Rosenberger, H. Rousseau, C. Rudolph, E. A. Rudolph, F. A. Rudolph, F. A.	Sioux Falls Parkston Pierre Onida New Mexico Pierre Lake Preston Aberdeen Burke Hot Springs P. Aberdeen Watertown Aberdeen Pennsylvania
Rich, E. L. Rieb, W. G. Riggs, T. F. Rimsa, Alfreds Riner, H. L. *Robbins, C. E. Roberts, C. S., Jr. Rodine, J. C. Roesel, R. W. Roper, C. E., M.M. Rosenberger, H. Rousseau, C. Rudolph, E. A. Rudolph, F. A. Rudd, E. T.	Sioux Falls Parkston Pierre Onida New Mexico Pierre Lake Preston Aberdeen Burke I. Hot Springs P. Aberdeen Watertown Aberdeen Pennsylvania Rapid City
Rich, E. L. Rieb, W. G. Riggs, T. F. Rimsa, Alfreds Riner, H. L. *Robbins, C. E. Roberts, C. S., Jr. Rodine, J. C. Roesel, R. W. Roper, C. E., M.M. Rosenberger, H. Rousseau, C. Rudolph, E. A. Rudolph, F. A. Ruud, E. T. Salladay, I. R.	Sioux Falls Parkston Pierre Onida New Mexico Pierre Lake Preston Aberdeen Burke I. Hot Springs P. Aberdeen Watertown Aberdeen Pennsylvania Rapid City Pierre
Rich, E. L. Rieb, W. G. Riggs, T. F. Rimsa, Alfreds Riner, H. L. *Robbins, C. E. Roberts, C. S., Jr. Rodine, J. C. Roesel, R. W. Roper, C. E., M.M. Rosenberger, H. Rousseau, C. Rudolph, E. A. Rudolph, F. A. Rudolph, F. A. Rudolph, E. A.	Sioux Falls Parkston Pierre Onida New Mexico Pierre Lake Preston Aberdeen Burke L. Hot Springs P. Aberdeen Watertown Aberdeen Pennsylvania Rapid City Pierre
Rich, E. L. Rieb, W. G. Riggs, T. F. Rimsa, Alfreds Riner, H. L. *Robbins, C. E. Roberts, C. S., Jr. Rodine, J. C. Roesel, R. W. Roper, C. E., M.M. Rosenberger, H. Rousseau, C. Rudolph, E. A. Rudolph, F. A. Rudolph, F. A. Rudolph, F. A. Rudolph, I. R. Sanders, M. E. Sanders, M. E.	Sioux Falls Parkston Pierre Onida New Mexico Pierre Lake Preston Aberdeen Burke L. Hot Springs P. Aberdeen Watertown Aberdeen Pennsylvania Rapid City Pierre Redfield
Rich, E. L. Rieb, W. G. Riggs, T. F. Rimsa, Alfreds Riner, H. L. *Robbins, C. E. Roberts, C. S., Jr. Rodine, J. C. Roesel, R. W. Roper, C. E., M.M. Rosenberger, H. Rousseau, C. Rudolph, E. A. Rudolph, F. A. Ruud, E. T. Salladay, I. R. Sanders, M. E. Sattler, T. H.	Sioux Falls Parkston Pierre Onida New Mexico Pierre Lake Preston Aberdeen Burke I. Hot Springs P. Aberdeen Watertown Aberdeen Pennsylvania Rapid City Pierre Redfield Yankton
Rich, E. L. Rieb, W. G. Riggs, T. F. Rimsa, Alfreds Riner, H. L. *Robbins, C. E. Roberts, C. S., Jr. Rodine, J. C. Roesel, R. W. Roper, C. E., M.M. Rosenberger, H. Rousseau, C. Rudolph, E. A. Rudolph, F. A. Rudolph,	Sioux Falls Parkston Pierre Onida New Mexico Pierre Lake Preston Aberdeen Burke Lake Springs Matertown Aberdeen Pennsylvania Rapid City Yankton Rapid City
Rich, E. L. Rieb, W. G. Riggs, T. F. Rimsa, Alfreds Riner, H. L. *Robbins, C. E. Roberts, C. S., Jr. Rodine, J. C. Roesel, R. W. Roper, C. E., M.M. Rosenberger, H. Rousseau, C. Rudolph, E. A. Rudolph, F. A. Rudolph, F. A. Ruud, E. T. Salladay, I. R. Sanders, M. E. Sattler, T. H. Saxton, A. J.	Sioux Falls Parkston Pierre Onida New Mexico Pierre Lake Preston Aberdeen Burke I. Hot Springs P. Aberdeen Watertown Aberdeen Pennsylvania Rapid City Pierre Redfield Yankton Rapid City
Rich, E. L. Rieb, W. G. Riggs, T. F. Rimsa, Alfreds Riner, H. L. *Robbins, C. E. Roberts, C. S., Jr. Rodine, J. C. Roesel, R. W. Roper, C. E., M.M. Rosenberger, H. Rousseau, C. Rudolph, E. A. Rudolph, F. A. Sanders, M. E. Sanders, M. E. Sattler, T. H. Saxton, A. J. Saxton, W. H.	Sioux Falls Parkston Pierre Onida New Mexico Pierre Lake Preston Aberdeen Burke L. Hot Springs P. Aberdeen Watertown Aberdeen Pennsylvania Rapid City Pierre Redfield Yankton Rapid City Huron
Rich, E. L. Rieb, W. G. Riggs, T. F. Rimsa, Alfreds Riner, H. L. *Robbins, C. E. Roberts, C. S., Jr. Rodine, J. C. Roesel, R. W. Roper, C. E., M.M. Rosenberger, H. Rousseau, C. Rudolph, E. A. Rudolph, F. A. Rudolph, F. A. Rudolph, F. A. Salladay, I. R. Sanders, M. E. Sattler, T. H. Saxton, A. J. Saxton, W. H. *Saylor, H. L. St.	Sioux Falls Parkston Pierre Onida New Mexico Pierre Lake Preston Aberdeen Burke Hot Springs P. Aberdeen Watertown Aberdeen Pennsylvania Rapid City Pierre Redfield Yankton Rapid City Huron
Rich, E. L. Rieb, W. G. Riggs, T. F. Rimsa, Alfreds Riner, H. L. *Robbins, C. E. Roberts, C. S., Jr. Rodine, J. C. Roesel, R. W. Roper, C. E., M.M. Rosenberger, H. Rousseau, C. Rudolph, E. A. Rudolph, F. A. Rudolph,	Sioux Falls Parkston Pierre Onida New Mexico Pierre Lake Preston Aberdeen Burke L. Hot Springs P. Aberdeen Watertown Aberdeen Pennsylvania Rapid City Pierre Redfield Yankton Rapid City Huron Huron
Rich, E. L. Rieb, W. G. Riggs, T. F. Rimsa, Alfreds Riner, H. L. *Robbins, C. E. Roberts, C. S., Jr. Rodine, J. C. Roesel, R. W. Roper, C. E., M.M. Rosenberger, H. Rousseau, C. Rudolph, E. A. Rudolph, F. A. Rudolph, F. A. Rudolph, F. A. Salladay, I. R. Sanders, M. E. Sattler, T. H. Saxton, A. J. Saxton, A. J. Saxton, W. H. *Saylor, H. L., Sr. Saylor, H. L., Jr.	Sioux Falls Parkston Pierre Onida New Mexico Pierre Lake Preston Aberdeen Burke L Hot Springs P. Aberdeen Watertown Aberdeen Pennsylvania Rapid City Pierre Redfield Yankton Rapid City Huron Huron
Opheim, W. L. Orr, R. Otey, B. O'Toole, T. F. Owen, G. S. *Owen, N. T. Pangburn, M. W. Pankow, L. J. Parke, L. L. Patt, W. H. Paulson, G. S. Peeke, A. P. Pemberton M. O. Peik, D. J. Peiper, W. Perry, E. J. Pfister, F. F. Phillips, R. K. Pittenger, E. A. Plowman, E. T. Pollerman, T. Porter, M. Price, Mary Price, Ronald Pokorny, J. F. Quinn, R. H. Quinn, R. H. Quinn, R. J. Radusch, F. J. Randall, O. S. Ranney, Brooks Ranney, T. P. Reagan, P. C. Reagan, R. Reaney, D. B. Reding, A. P. Reul, T. W. Rich, E. L. Rieb, W. G. Riggs, T. F. Rimsa, Alfreds Riner, H. L. *Robbins, C. E. Roberts, C. S., Jr. Rodine, J. C. Roesel, R. W. Roper, C. E., M.M. Rosenberger, H. Rousseau, C. Rudolph, F. A. Rudolp	Sioux Falls Parkston Pierre Onida New Mexico Pierre Lake Preston Aberdeen Burke L. Hot Springs P. Aberdeen Watertown Aberdeen Pennsylvania Rapid City Pierre Redfield Yankton Rapid City Huron Huron Redfield
Rich, E. L. Rieb, W. G. Riggs, T. F. Rimsa, Alfreds Riner, H. L. *Robbins, C. E. Roberts, C. S., Jr. Rodine, J. C. Roesel, R. W. Roper, C. E., M.M. Rosenberger, H. Rousseau, C. Rudolph, E. A. Rudolph, F. A. Rudolph, F. A. Rudolph, F. A. Salladay, I. R. Sanders, M. E. Sattler, T. H. Saxton, A. J. Saxton, A. J. Saxton, W. H. *Saylor, H. L., Sr. Saylor, H. L., Jr. Scallin, P. R.	Sioux Falls Parkston Pierre Onida New Mexico Pierre Lake Preston Aberdeen Burke L. Hot Springs P. Aberdeen Watertown Aberdeen Pennsylvania Rapid City Pierre Redfield Yankton Rapid City Huron Huron Huron Redfield
Rich, E. L. Rieb, W. G. Riggs, T. F. Rimsa, Alfreds Riner, H. L. *Robbins, C. E. Roberts, C. S., Jr. Rodine, J. C. Roesel, R. W. Roper, C. E., M.M. Rosenberger, H. Rousseau, C. Rudolph, F. A. Salladay, I. R. Sanders, M. E. Sattler, T. H. Saxton, A. J. Saxton, W. H. *Saylor, H. L., Jr. Saylor, H. L., Jr. Scallin, P. R. Scheib, A. P.	Sioux Falls Parkston Pierre Onida New Mexico Pierre Lake Preston Aberdeen Burke I. Hot Springs P. Aberdeen Watertown Aberdeen Pennsylvania Rapid City Pierre Redfield Yankton Rapid City Huron Huron Redfield Watertown
Rich, E. L. Rieb, W. G. Riggs, T. F. Rimsa, Alfreds Riner, H. L. *Robbins, C. E. Roberts, C. S., Jr. Rodine, J. C. Roesel, R. W. Roper, C. E., M.M. Rosenberger, H. Rousseau, C. Rudolph, E. A. Rudolph, E. A. Rudolph, F. A. Rudolph, F. A. Rudolph, F. A. Salladay, I. R. Sanders, M. E. Sattler, T. H. Saxton, A. J. Saxton, W. H. *Saylor, H. L., Sr. Saylor, H. L., Jr. Scallin, P. R. Scheib, A. P. Scheffel, A. R.	Sioux Falls Parkston Pierre Onida New Mexico Pierre Lake Preston Aberdeen Burke L Hot Springs P. Aberdeen Watertown Aberdeen Pennsylvania Rapid City Pierre Redfield Yankton Huron Huron Redfield Watertown Redfield Watertown
Rich, E. L. Rieb, W. G. Riggs, T. F. Rimsa, Alfreds Riner, H. L. *Robbins, C. E. Roberts, C. S., Jr. Rodine, J. C. Roesel, R. W. Roper, C. E., M.M. Rosenberger, H. Rousseau, C. Rudolph, E. A. Rudolph, F. A. Rudolph, F. A. Rudolph, F. A. Salladay, I. R. Sanders, M. E. Sattler, T. H. Saxton, W. H. *Saylor, H. L., Sr. Saylor, H. L., Sr. Saylor, H. L., Jr. Scallin, P. R. Scheifel, A. R.	Sioux Falls Parkston Pierre Onida New Mexico Pierre Lake Preston Aberdeen Burke I. Hot Springs P. Aberdeen Watertown Aberdeen Pennsylvania Rapid City Pierre Redfield Yankton Rapid City Huron Thuron Redfield Watertown Redfield Redfield
Rich, E. L. Rieb, W. G. Riggs, T. F. Rimsa, Alfreds Riner, H. L. *Robbins, C. E. Roberts, C. S., Jr. Rodine, J. C. Roesel, R. W. Roper, C. E., M.M. Rosenberger, H. Rousseau, C. Rudolph, E. A. Rudolph, F. A. Rudolph, F. A. Rudolph, F. A. Rudolph, F. A. Salladay, I. R. Sanders, M. E. Sattler, T. H. Saxton, A. J. Saxton, W. H. *Saylor, H. L., Jr. Scallin, P. R. Scheib, A. P. Scheffel, A. R. Scheller, D. D.	Sioux Falls Parkston Pierre Onida New Mexico Pierre Lake Preston Aberdeen Burke Hot Springs P. Aberdeen Pennsylvania Rapid City Pierre Redfield Yankton Rapid City Huron Huron Huron Redfield Watertown Redfield Watertown
Rich, E. L. Rieb, W. G. Riggs, T. F. Rimsa, Alfreds Riner, H. L. *Robbins, C. E. Roberts, C. S., Jr. Rodine, J. C. Roesel, R. W. Roper, C. E., M.M. Rosenberger, H. Rousseau, C. Rudolph, E. A. Rudolph, F. A. Rudolph, F. A. Salladay, I. R. Sanders, M. E. Sattler, T. H. Saxton, A. J. Saxton, W. H. *Saylor, H. L., Sr. Saylor, H. L., Jr. Scallin, P. R. Scheib, A. P. Scheffel, A. R. Scheller, D. D. Schmidt M.	Sioux Falls Parkston Pierre Onida New Mexico Pierre Lake Preston Aberdeen Burke Aberdeen Watertown Aberdeen Pennsylvania Rapid City Pierre Redfield Yankton Rapid City Huron Huron Redfield Watertown Redfield Watertown Redfield Watertown Redfield Watertown
Rich, E. L. Rieb, W. G. Riggs, T. F. Rimsa, Alfreds Riner, H. L. *Robbins, C. E. Roberts, C. S., Jr. Rodine, J. C. Roesel, R. W. Roper, C. E., M.M. Rosenberger, H. Rousseau, C. Rudolph, E. A. Rudolph, F. A. Rudolph, F. A. Rudolph, F. A. Rudolph, F. A. Salladay, I. R. Sanders, M. E. Sattler, T. H. Saxton, A. J. Saxton, W. H. *Saylor, H. L., Jr. Scallin, P. R. Scheib, A. P. Scheffel, A. R. Scheller, D. D. Schmidt, M. A.	Sioux Falls Parkston Pierre Onida New Mexico Pierre Lake Preston Aberdeen Burke L Hot Springs P. Aberdeen Pennsylvania Rapid City Pierre Redfield Yankton Rapid City Huron Huron Redfield Watertown Redfield Watertown Huron Redfield Watertown Redfield Watertown
Rich, E. L. Rieb, W. G. Riggs, T. F. Rimsa, Alfreds Riner, H. L. *Robbins, C. E. Roberts, C. S., Jr. Rodine, J. C. Roesel, R. W. Roper, C. E., M.M. Rosenberger, H. Rousseau, C. Rudolph, E. A. Rudolph, F. A. Rudolph, F. A. Rudolph, F. A. Salladay, I. R. Sanders, M. E. Sattler, T. H. Saxton, A. J. Saxton, A. J. Saxton, W. H. *Saylor, H. L., Jr. Scallin, P. R. Scheib, A. P. Scheffel, A. R. Scheller, D. D. Schmidt, M. A. Schuchardt, I. L.	Sioux Falls Parkston Pierre Onida New Mexico Pierre Lake Preston Aberdeen Burke L Hot Springs P. Aberdeen Watertown Aberdeen Pennsylvania Rapid City Pierre Redfield Yankton Rapid City Huron Rapid City Huron Redfield Vankton Rapid City Aberdeen Huron Aberdeen
Rich, E. L. Rieb, W. G. Riggs, T. F. Rimsa, Alfreds Riner, H. L. *Robbins, C. E. Roberts, C. S., Jr. Rodine, J. C. Roesel, R. W. Roper, C. E., M.M. Rosenberger, H. Rousseau, C. Rudolph, E. A. Rudolph, F. A. Rudolph, F. A. Rudolph, F. A. Rudolph, F. A. Salladay, I. R. Sanders, M. E. Sattler, T. H. Saxton, W. H. *Saylor, H. L., Jr. Saylor, H. L., Jr. Scallin, P. R. Scheib, A. P. Scheffel, A. R. Scheller, D. D. Schmidt, M. A. Schuchardt, I. L. Sebring F. II	Sioux Falls Parkston Pierre Onida New Mexico Pierre Lake Preston Aberdeen Burke L. Hot Springs P. Aberdeen Watertown Aberdeen Pennsylvania Rapid City Pierre Redfield Yankton Rapid City Huron Huron Huron Redfield Watertown Redfield Watertown Redfield Arlington Watertown Aberdeen
Rich, E. L. Rieb, W. G. Riggs, T. F. Rimsa, Alfreds Riner, H. L. *Robbins, C. E. Roberts, C. S., Jr. Rodine, J. C. Roesel, R. W. Roper, C. E., M.M. Rosenberger, H. Rousseau, C. Rudolph, E. A. Rudolph, F. A. Rudolph, F. A. Rudolph, F. A. Salladay, I. R. Sanders, M. E. Sattler, T. H. Saxton, A. J. Saxton, A. J. Saxton, W. H. *Saylor, H. L., Jr. Scallin, P. R. Scheib, A. P. Scheib, A. P. Scheffel, A. R. Scheller, D. D. Schmidt, M. A. Schuchardt, I. L. Sebring, F. U.	Sioux Falls Parkston Pierre Onida New Mexico Pierre Lake Preston Aberdeen Burke Lake Preston Aberdeen Watertown Aberdeen Pennsylvania Rapid City Pierre Redfield Yankton Rapid City Huron Ruron Huron Redfield Watertown Aberdeen Huron Auron Au
Scheib, A. P. Scheffel, A. R. Scheller, D. D. Schmidt, M. A. Schuchardt, I. L. Sebring, F. U. Semones. A. Jr.	Watertown Redfield Arlington Watertown Bertield Aberdeen Martin M.M. Lead
Scheib, A. P. Scheffel, A. R. Scheller, D. D. Schmidt, M. A. Schuchardt, I. L. Sebring, F. U. Semones. A. Jr.	Watertown Redfield Arlington Watertown Bertield Aberdeen Martin M.M. Lead
Scheib, A. P. Scheffel, A. R. Scheller, D. D. Schmidt, M. A. Schuchardt, I. L. Sebring, F. U. Semones. A. Jr.	Watertown Redfield Arlington Watertown Bertield Aberdeen Martin M.M. Lead
Scheib, A. P. Scheffel, A. R. Scheller, D. D. Schmidt, M. A. Schuchardt, I. L. Sebring, F. U. Semones, A., Jr., Sercl, W. F. Sherrill. S. F.	Watertown Redfield Arlington Watertown Aberdeen Martin M.M. Lead Sioux Falls Belle Fourche
Scheib, A. P. Scheffel, A. R. Scheller, D. D. Schmidt, M. A. Schuchardt, I. L. Sebring, F. U. Semones, A., Jr., Sercl, W. F. Sherrill. S. F.	Watertown Redfield Arlington Watertown Aberdeen Martin M.M. Lead Sioux Falls Belle Fourche
Scheib, A. PScheffel, A. RScheller, D. DSchmidt, M. A. Schuchardt, I. L. Sebring, F. USemones, A., Jr., Sercl, W. FSherrill, S. FShreves, H.	Watertown Redfield Arlington Watertown Aberdeen Martin M.M. Lead Sioux Falls Sioux Falls
Scheib, A. PScheffel, A. RScheller, D. DSchmidt, M. A. Schuchardt, I. L. Sebring, F. USemones, A., Jr., Sercl, W. FSherrill, S. FShreves, H.	Watertown Redfield Arlington Watertown Aberdeen Martin M.M. Lead Sioux Falls Sioux Falls
Scheib, A. PScheffel, A. RScheller, D. DSchmidt, M. A. Schuchardt, I. L. Sebring, F. USemones, A., Jr., Sercl, W. FSherrill, S. FShreves, H.	Watertown Redfield Arlington Watertown Aberdeen Martin M.M. Lead Sioux Falls Sioux Falls
Scheib, A. PScheffel, A. RScheller, D. DSchmidt, M. A. Schuchardt, I. L. Sebring, F. USemones, A., Jr., Sercl, W. FSherrill, S. FShreves, H.	Watertown Redfield Arlington Watertown Aberdeen Martin M.M. Lead Sioux Falls Sioux Falls
Scheib, A. PScheffel, A. RScheller, D. DSchmidt, M. A. Schuchardt, I. L. Sebring, F. USemones, A., Jr., Sercl, W. FSherrill, S. FShreves, H.	Watertown Redfield Arlington Watertown Aberdeen Martin M.M. Lead Sioux Falls Sioux Falls
Scheib, A. PScheffel, A. RScheller, D. DSchmidt, M. A. Schuchardt, I. L. Sebring, F. USemones, A., Jr., Sercl, W. FSherrill, S. FShreves, H.	Watertown Redfield Arlington Watertown Aberdeen Martin M.M. Lead Sioux Falls Sioux Falls
Scheib, A. P. Scheffel, A. R. Scheller, D. D. Schmidt, M. A. Schuchardt, I. L. Sebring, F. U. Semones, A., Jr., Sercl, W. F. Sherrill. S. F.	Watertown Redfield Arlington Watertown Aberdeen Martin M.M. Lead Sioux Falls Sioux Falls

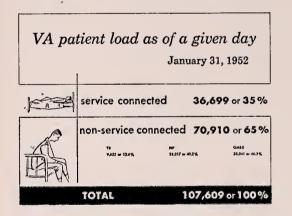
Smith, G. W Sioux Falls
C C A T1
Coming No. I. Domini City
Spain, M. L. Rapid City
Spirtos, M Yankton
Spirv. A. W. Mobridge
Stahman F Sioux Falls
Ctanalana To Mr. 3711:
Stansbury, E. M vermillion
Steele, G., M.M Aberdeen
Steele J P Vankton
Ctains D V
Steiner, P. K Lemmon
*Stegeman, S. BSalem
Stern, C. A. Sioux Falls
Storrong C T Mitchell
Stevens, C. I Witchen
*Stevens, G. A Soux Falls
*Stewart, J. L. Spearfish
Stowart N W Lord
Ct-14- C D
Stoltz, C. R Watertown
Stransky, J Watertown
Strauss B Vehlem
Studenberg I F Winner
Studenberg, J. E winner
Suckow, E. E Garretson
Sundet, N. J. Kadoka
Swanson C I Piorno
Table M. C. D Fierre
Tank, M. C Brookings
Tesar, C., M.M. Pierre
Thompson W V M M Vankton
Tidlipson, W. V., M.M. Talikton
Tidd, J. I. Yankton
Tobin, F. J Mitchell
Tobin, L. W. Mitchell
Torkildson C C Molaughlin
Totaliuson, G. C McLaughin
Totten, F. C. Lemmon
*Townsend, L. J. Belle Fourche
Trivett I C Watertown
m-1-44 T
Ischetter, J Huron
Tschetter, P. S. Huron
Urhanyi E. W. Gettycherg
Von Domonia D. E. Cinas E. II
van Demark, R. E Sloux Falls
VanDemark, W. E Sioux Falls
VanHeuvelen G. J. Pierre
Vanlier P. C. Cierry Fella
Validiei, F. C Sloux Fails
Vogele, C. L Aberdeen
Volin, H. P. Lennox
Volin V V Sioux Folks
Voili, V. V
vonburg, v. R Witchell
Voss, E. P Kimball
TTT 1/ 0 T
Walters S. J. Watertown
Walters, S. J. Watertown
Walters, S. J. Watertown Warpinski, M. A. McLaughlin
Warpinski, M. A McLaughlin Watson, E. S Brookings
Walters, S. J. Watertown Warpinski, M. A. McLaughlin Watson, E. S. Brookings Weber, R. A. Mitchell
Walters, S. J. Watertown Warpinski, M. A. McLaughlin Watson, E. S. Brookings Weber, R. A. Michell Weir M. J. Madison
Walters, S. J. Watertown Warpinski, M. A. McLaughlin Watson, E. S. Brookings Weber, R. A. Mitchell Weir, M. J. Madison
Walters, S. J. Watertown Warpinski, M. A. McLaughlin Watson, E. S. Brookings Weber, R. A. Mitchell Weir, M. J. Madison *Weishaar, C. E. Aberdeen
Walters, S. J. Watertown Warpinski, M. A. McLaughlin Watson, E. S. Brookings Weber, R. A. Mitchell Weir, M. J. Madison *Weishaar, C. E. Aberdeen Welbes, M. A. Bridgewater
Walters, S. J. Watertown Warpinski, M. A. McLaughlin Watson, E. S. Brookings Weber, R. A. Mitchell Weir, M. J. Madison *Weishaar, C. E. Aberdeen Welbes, M. A. Bridgewater Wessman, N. E. Sioux Falls
Walters, S. J. Waterfown Warpinski, M. A. McLaughlin Watson, E. S. Brookings Weber, R. A. Mitchell Weir, M. J. Madison *Weishaar, C. E. Aberdeen Welbes, M. A. Bridgewater Wessman, N. E. Sioux Falls Weetaby, J. B. Madison
Walters, S. J. Watertown Warpinski, M. A. McLaughlin Watson, E. S. Brookings Weber, R. A. Mitchell Weir, M. J. Madison *Weishaar, C. E. Aberdeen Welbes, M. A. Bridgewater Wessman, N. E. Sioux Falls Westaby, J. R. Madison
Smith, G. W. Sioux Falls Soe, C. A. Lead Spain, M. L. Rapid City Spirtos, M. Yankton Spiry, A. W. Mobridge Stahman, F. Sioux Falls Stansbury, E. M. Vermillion Steele, G., M.M. Aberdeen Steele, J. P. Yankton Steiner, P. K. Lemmon *Stegeman, S. B. Salem Stern, C. A. Sioux Falls Stevens, C. I. Mitchell *Stevens, G. A. Soux Falls Stewart, J. L. Spearfish Stewart, J. L. Spearfish Stewart, N. W. Lead Stoltz, C. R. Watertown Stransky, J. Watertown Strausky, J. Watertown Strausky, J. Watertown Strausky, J. Kadoka Swanson, C. L. Pierre Tank, M. C. Brookings Tesar, C., M.M. Pierre Tank, M. C. Brookings Tesar, C., M.M. Yankton Tidd, J. T. Yankton Tobin, F. J. Mitchell Tobin, L. W. Mitchell Torkildson, G. C. McLaughlin Totten, F. C. Lemmon *Townsend, L. J. Belle Fourche Trivett, J. C. Watertown Tschetter, J. Huron Tschetter, J. Huron Tschetter, P. S. Huron Urbanyi, E. W. Gettysberg VanDemark, R. E. Sioux Falls VanHeuvelen, G. J. Pierre VanLier, P. C. Sioux Falls VanHeuvelen, G. J. Pierre VanLier, P. C. Sioux Falls Vonburg, V. R. Mitchell Watson, E. S. Watertown Warpinski, M. A. McLaughlin Watson, E. S. Brookings Weber, R. A. Mitchell Weir, M. J. R. Madison *Weishaar, C. E. Aberdeen Welbes, M. A. Bridgewater Wessman, N. E. Sioux Falls Westaby, J. R. Madison Westaby, R. S., Jr. Martin
Walters, S. J. Waterfown Warpinski, M. A. McLaughlin Watson, E. S. Brookings Weber, R. A. Mitchell Weir, M. J. Madison *Weishaar, C. E. Aberdeen Welbes, M. A. Bridgewater Wessman, N. E. Sioux Falls Westaby, J. R. Madison Westaby, R. Madison Mestaby, R. S., Jr. Martin White, W. W. McLaughlin
Walters, S. J. Waterfown Warpinski, M. A. McLaughlin Watson, E. S. Brookings Weber, R. A. Mitchell Weir, M. J. Madison *Weishaar, C. E. Aberdeen Welbes, M. A. Bridgewater Wessman, N. E. Sioux Falls Westaby, J. R. Madison Westaby, R. S., Jr. Martin White, W. W. McLaughlin Whitney N. R. Banid City
Walters, S. J. Watertown Warpinski, M. A. McLaughlin Watson, E. S. Brookings Weber, R. A. Mitchell Weir, M. J. Madison *Weishaar, C. E. Aberdeen Welbes, M. A. Bridgewater Wessman, N. E. Sioux Falls Westaby, J. R. Madison Westaby, R. S., Jr. Martin White, W. W. McLaughlin Whitney, N. R. Rapid City
White, W. W. McLaughlin Whitney, N. R. Rapid City Whitson, G. E. Madison
White, W. W. McLaughlin Whitney, N. R. Rapid City Whitson, G. E. Madison
White, W. W. McLaughlin Whitney, N. R. Rapid City Whitson, G. E. Madison
White, W. W. McLaughlin Whitney, N. R. Rapid City Whitson, G. E. Madison
White, W. W. McLaughlin Whitney, N. R. Rapid City Whitson, G. E. Madison
White, W. W. McLaughlin Whitney, N. R. Rapid City Whitson, G. E. Madison
White, W. W. McLaughlin Whitney, N. R. Rapid City Whitson, G. E. Madison
White, W. W. McLaughlin Whitney, N. R. Rapid City Whitson, G. E. Madison
White, W. W. McLaughlin Whitney, N. R. Rapid City Whitson, G. E. Madison
White, W. W. McLaughlin Whitney, N. R. Rapid City Whitson, G. E. Madison
White, W. W. McLaughlin Whitney, N. R. Rapid City Whitson, G. E. Madison
White, W. W. McLaughlin Whitney, N. R. Rapid City Whitson, G. E. Madison
White, W. W. McLaughlin Whitney, N. R. Rapid City Whitson, G. E. Madison
White, W. W. McLaughlin Whitney, N. R. Rapid City Whitson, G. E. Madison
White, W. W. McLaughlin Whitney, N. R. Rapid City Whitson, G. E. Madison
White, W. W. McLaughlin Whitney, N. R. Rapid City Whitson, G. E. Madison
White, W. W. McLaughlin Whitney, N. R. Rapid City Whitson, G. E. Madison
White, W. W. McLaughlin Whitney, N. R. Rapid City Whitson, G. E. Madison
White, W. W. McLaughlin Whitney, N. R. Rapid City Whitson, G. E. Madison Willcockson, T. H. Yankton Willen, Abner Clark Williams, D. B. Sioux Falls Williams, F. R. Rapid City Williams, M. F. Conde Wold, H. R. Madison Wood, G. F. Rapid City *Wood, T. J. Huron *Wright, O. R. Huron Yackley, J. V. Rapid City Zandersons, V. Herreid Zarbaugh, G. F. Deadwood Zeidaks, O. Isabel *Zimmerman, Goldie, E.
White, W. W. McLaughlin Whitney, N. R. Rapid City Whitson, G. E. Madison Willcockson, T. H. Yankton Willen, Abner Clark Williams, D. B. Sioux Falls Williams, F. R. Rapid City Williams, M. F. Conde Wold, H. R. Madison Wood, G. F. Rapid City *Wood, T. J. Huron *Wright, O. R. Huron Yackley, J. V. Rapid City Zandersons, V. Herreid Zarbaugh, G. F. Deadwood Zeidaks, O. Isabel *Zimmerman, Goldie, E.
White, W. W. McLaughlin Whitney, N. R. Rapid City Whitson, G. E. Madison

In Viewing the VA Medical Program . . .



Of 511,895 patients discharged from VA hospitals in 1951, only 15.4% were treated for illnesses or injuries incurred as a result of military service. Physicians believe it is unsound to continue authorization of "free" lifetime medical care for those who suffer no mishap while in uniform, while other citizens with no military background must pay their own way.

In Viewing the VA Medical Program . . .



While the VA lists its patient lood an a given doy os 35% service-connected, only the long-range view of admissions and discharges over a year's time gives a truly accurate picture of the service-connected lood (only 15.4%). This "discrepancy" appears because the VA's listing of 35% on a daily basis is not affected by the yearly turn-over of patients—the ratio of VA potients remaining to those treated and discharged (1 to 5.1). Over a period of a year, 84.6% of VA potients are treated for disabilities incurred after—and having na relationship to—militory service.

In Viewing the VA Medical Program . . .

how VA facilities are being used

Patients Discharged During 1951			
	TOTAL	SERVICE CONNECTED	NON-SERVICE CONNECTED
76	21,388	10,550 = 2.1%	10,838 = 2.1%
NP	47,673	16,530 = 3.2%	31,143 = 6.1%
GM&5	442,834	51,820 = 10.1%	391,014 = 76.4%
TOTAL	511,895	78,900 15.4%	432,995 84.6%

The medical prafession recommends that VA medical care be maintoined for treatment of all service-connected coses and tempororily for all wartime veterans suffering from tuberculosis or neuropsychiotric disorders of non-service-connected origin, within limits of existing VA facilities, if they cannot afford private medical care. General medical and surgicol potients with non-service-connected disabilities (now 76.4% of all VA patients) should not be entitled to "free" federal medical care.

In Viewing the VA Medical Program . . .



VA explanation of patient load on a given day

The above classification is presented by the VA as an explonation of the large non-service-connected patient load in its hospitals. The medical prafession recammends that only the first category and thase in the third whose disobilities are determined to be service-connected should be entitled to federal medical care. Non-service-connected TB and NP coses should continue to be treated an a temporary bosis until community and state facilities can be readied. The remaining groups abviausly have no service-connection and are hospitalized for illnesses or injuries incurred in civilian life.



HAROLD S. BAILEY, PH.D.
EDITOR
Division of Pharmacy
College Station, South Dakota

PRESIDENTIAL ADDRESS* 68th Annual Convention South Dakota State Pharmaceutical Association Neil E. Fuller Chamberlain, South Dakota

Mr. Chairman, Officers and Members of the S.D.Ph.A., Honored Guests, Ladies, and Gentlemen:

Last year upon my election as your President, I felt very inadequate, for the task before me seemed great indeed. My lack of time and ability also added to the apparent size of the job. It has proven to be a fine experience for me, and one I feel has helped me to learn that the Association president has many responsibilities, of which I as a member for over 30 years had not fully realized.

One of the more interesting experiences I had the past year was the opportunity to attend the National Association of Retail Druggists Convention held in Chicago last October. I will not go into the details of the convention at this time as they will be covered in Vice-President Charles Van de Walle's report. I would like, however, to mention that I was on the Nominating Committee. I sat next to a southern gentleman in this committee room. He had in his hand a slip of paper on which was written the names of the future officers of the N.A.R.D. for the year 1955. I had heard from another delegate before entering the room that it would be that way. The nominations went off like clock work. Before the convention closed I learned that these men were men of ability and had given many years of their time and hard work to the N.A.R.D. These coveted officers were in a small way a reward for work well done.

Another interesting feature of the year, which I accepted with pleasure, was the kind invitation from Chan Shirley to attend the Organizational Meeting of the pharmacists of the Brookings District. This was a most enthusiastic meeting and I cannot help but feel that if all of the South Dakota druggists would "drum up" as much enthusiasm in attending the State Convention, we would

have a real live organization. This meeting was preceded by a fine banquet at the Brookings Country Club, and Mrs. Fuller and I wish to express our thanks for having been at such a delightful affair.

Pharmacy School

While in Brookings I visited the School of Pharmacy. The improvement in the housing of our School of Pharmacy is, I think, one of the greatest steps forward we have taken for the better training of our future pharmacists. The enlargement of the floor space, the new equipment installed, and the very efficient arrangement all lends itself to making an outstanding pharmacy school. great deal of credit must go to Dean Floyd LeBlanc for his initiative and foresight in planning these improvements. We must not forget President John Headley and the Board of Regents for their cooperation. One year ago I had the privilege of going through the new Drake University School of Pharmacy at Des Moines, Iowa. Even considering the fact that the Drake School of Pharmacy building was planned from the ground up to accommodate a pharmacy school, I am sure we do not have to take a back seat here in South Dakota when comparing these schools.

Pharmacy Problems Complex

I have been actively engaged in the practice of pharmacy for the past forty years, and it seems to me the problems facing us today are more complex than they have ever been, both at the local and national level. Fair Trade has had its share of the headlines. Some find a world of good in the fair trade act; others cannot find anything good about it. However, I firmly believe we must fight to keep fair trade in force. It is the only salvation for the small business on Main Street. The Durham-Humphrey Act is another law which has its followers and dissenters. The five year college law comes in for its pros and cons, along

^{*} Given at the Aberdeen Convention, June 21, 1954.

wih many rules and regulations. All these differences must be resolved into a united pharmacy front by the man on the ground floor. We as druggists are the men in that position. If we do not solve our problems, someone else will ,and when they do, we are sure to wish we had taken action at the proper time.

Now is the time you can do something about your future. What we do as individuals may not have too much bearing on the future; but if we can sit down together at these conventions and thrash things out, our combined efforts can mean something for the future. If you like the way in which your State Association or your State Board of Pharmacy functions, express your appreciation. And, likewise, if you do not like their actions, be on hand, get up on your feet and express your dissatisfaction. Stand up and be counted. These conventions are part of the activities of your association. Organized pharmacy needs you; you need organized pharmacy.

I do not wish to criticize any druggist in the state of South Dakota for the way in which he may conduct his business. The drug store in South Dakota is both a professional and a commercial institution. We are purveyors of health and sellers of highly diversified types of merchandise. Evidence shows us that our public wants us to have at their disposal all the drugs, accessories and supplies necessary to good health. However, the public also expects us to maintain other lines of convenience goods. Our task and the point on which the survival of the "drug store" depends is in keeping our sense of balance and porportion and staying "drug stores," and in refraining from undue emphasis on variety lines

I would like to discuss for a moment the office of Secretary of the Association. I doubt that many of you realize the tremendous work load carried by our secretary. I certainly did not before I took office. A secretary of a group such as our must be efficient and familiar with the inner workings of our Association. For continuity of action and progressive planning, a good permanent secretary is essential. None of us are indispensable. However, I firmly believe that Bliss Wilson is one of the few men capable of doing

this job as it should be done. He is, whether we officers care to admit it or not, the backbone and guiding force of our Association, and yet he is diligent in seeing that his actions are for the good of the group not for self. My personal thanks and I am sure those of the Association go to Bliss.

I would like to commend Dr. H. S. Bailey of our own School of Pharmacy for the fine work he has done as editor of the Pharmaceutical Section in the South Dakota Journal of Medicine and Pharmacy. I would like to see this work continued. It has been filled with information of importance to both the pharmaceutical and medical professions.

Today, in almost all of the drug journals we read of the adverse decisions being handed down by courts of different states against drug store operations. I think it is imperative that we as pharmacists of the state of South Dakota study our pharmacy laws with a view to improving our position where necessary. Government at the local, state or federal level is the concern of druggists as citizens. Most of us are quick to say we are too busy to bother with matters of government, while at the same time we growl in objection to things done contrary to the way we see them. I say more of the druggists of South Dakota should try their hands at politics.

John W. Dargavel Foundation

A topic of national import to druggists on which I feel it essential to dwell briefly is the John W. Dargavel Foundation. This Foundation's purpose is, through loans, to aid druggists whose business has been destroyed, to help worthy pharmacy students, and to provide through outright gifts aid to druggists whose business has been devastated by disaster. Persons of highest integrity are charged with direction of the Foundation, and the main source of funds is from druggists themselves. If you have any extra cash earmarked for charity, please give this Foundation your earnest consideration.

It has long been my contention that it seemed like "unprofessional conduct" to supply doctors with prescription blanks imprinted with "Take to" followed by the druggist or drug store name and address. I have firmly believed it was a privilege of the pa-

tient to choose where he or she wanted to have their prescription filled since the prescription is his or her property. The American Medical Association some time ago went on record opposing the use of these printed blanks although they are still used in a great many places.

An over-zealous druggist in Iowa had not only his name and address printed on prescription blanks but, also, a map giving directions to his store. This resulted in a request by J. F. Rabe, Secretary of the Iowa State Pharmacy Board, for a ruling on imprinted prescription blanks by the Attorney General's Office. The decision of the Attorney General of Iowa ruled against the use of blanks with any personalized printing thereon. In support of this opinion the section of law which defines, "unprofessional conduct," was cited: "Solicitation of professional patronage by agents, or 'steerers,' or profiting, by the acts of those representing themselves to be agents of the licensee, is unprofessional." He ruled that if a licensed pharmacist makes arrangement for the use of prescription blanks or illustrated maps and those with whom he makes such arrangements, namely the physician, deliver them to his patients, the pharmacist is subject to the charge of "unprofessional conduct." This charge is not to be taken lightly, since it is grounds for license revocation.

PUBLIC RELATIONS

Another thing which interests me in the public relations field concerns our pharmacy laws and their observance. I cannot think of a more helpful boost to our public relations than to let Mr. and Mrs. Public know that we pride ourselves in complying with rigid conditions laid down by the State Pharmacy Laws for the control and regulation of the practice of pharmacy. If the dispensing of prescriptions is to be entrusted to nonregistered dabblers, is this not equivalent to a declaration that prescription work does not call for any special training? Does not such a practice pull the rug from under pharmaceutical education and belittle the State Board Certificate which the law requires be prominently displayed in our stores? If there is no sense in having a pharmacist in charge, what happens to our struggle for a brighter place in public estimation? If we play pharmacy down, who can we expect to play it up? Can

we expect the public to place a higher value on pharmacy than we ourselves place upon it?

Pharmacy is going through a critical period. It is plagued by professional and economic problems. To survive, as it must survive, I believe we must create a position of integrity and prestige with our public. We urgently need to find ways and means of making the public more appreciative of the true value of pharmacy as a profession and of the drug store as an indispensable health service institution.

The N.A.R.D. is also furthering the interest

of the pharmacist through editorials on public relations. In the June 21 issue you will note an editorial commenting on a recent syndicated column which amounted to a smear on pharmacy. It is as follows: "Dorothy Kilgallen, a well-known columnist, said 'A startling report now being assembled in Washington will reveal that hundreds of pharmacists who make up narcotic prescriptions are themselves drug addicts.' The N.A.R.D. tried to contact Miss Kilgallen and learned she was vacationing in Europe. Then along came a letter from her secretary and from it we quote: 'Miss Kilgallen could only say that the story came from an unimpeachable source in Washington, D. C., and undoubtedly the story will be confirmed after the investigation has been completed. You may be sure Miss Kilgallen had no desire to cast aspersions on the thousands of reputable druggists throughout the nation. However, since the facts will become public property in due time, she saw no point in suppression of the information.' The N.A.R.D. representative, George Frates, in Washington told the N.A.R.D. that H. J. Anslinger, commissioner of narcotics, was unaware of the investigation mentioned by Miss Kilgallen. Later, Mr. Frates advised the N.A.R.D. that the Food & Drug Administration and the Senate Subcommittee on delinquency knew nothing about the rumored probe of addicts among the pharmacists of the country.

There are in round figures 100,000 pharmacists and about 50,000 drug stores in the United States. The records in the Bureau of Narcotics in Washington disclose as follows:

In 1950 only 8 pharmacists were known to be drug addicts.

In 1951 there were just 3.

(Continued on Page 296)

He Was the Last Man

Pfc. Hector A. Cafferata Jr., USMCR Medal of Honor





Peace is for the strong!
For peace and prosperity save with
U.S. Defense Bonds!

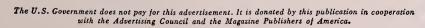
It was during the Chosin reservoir fighting. Against F Company's hill position, Reds were attacking in regimental strength. The last of Private Cafferata's fire-teammates had just become a casualty, leaving a gap in the defense line. If the enemy could exploit it, they could smash the entire perimeter.

Exposing himself to devastating fire, Private Cafferata maneuvered along the line. Alone, he killed fifteen Chinese, routed the rest, and held till reinforcements plugged the hole.

The Reds hit again. A grenade fell into a gully full of wounded. Private Cafferata hurled it back, saving the men but suffering severe wounds. Ignoring intense pain, he still fought on until a sniper got him.

"If we really want to protect ourselves from the Commies," says Private Cafferata, now retired because of wounds, "we've got to go all out. And one thing all of us at home can do—should do—is invest in our country's Defense Bonds. Sure, Bonds are our personal savings for a rainy day. But they're more—they're muscle behind our G.I.s' bayonets, too!"

Now E Bonds pay 3%! Now, improved Series E Bonds start paying interest after 6 months. And average 3% interest, compounded semiannually when held to maturity. Also, all maturing E Bonds automatically go on earning—at the new rate—for 10 more years. Today, start investing in Series E Bonds through the Payroll Savings Plan; you can sign up to save as little as \$2.00 a payday if you wish.







New Line of Products For Veterinarians Only Introduced by Lederle

A new line of professional products, including Polyotic (tetracycline), the first broad-spectrum antibiotic for animal use to be available exclusively to veterinarians, as well as other products hitherto marketed through non-professional outlets, has been introduced by Lederle Laboratories Division, American Cyanamid Company.

Available after July 1, 1954, the Lederle Professional Veterinary Line includes the following pharmaceuticals and biologicals:

POLYOTIC Tetracycline Hydrochloride Soluble (Tinted) Powder

POLYOTIC Tetracycline Hydrochloride OB-LETS (R)

POLYOTIC Tetracycline Hydrochloride Topical Ointment

POLYOTIC Tetracycline Hydrochloride Capsules, 50, 100, 250 mg.

POLYOTIC Tetracycline Hydrochloride Tablets, 50, 100, 250 mg.

POLYOTIC Tetracycline Hydrochloride Ophthalmic Ointment

POLYOTIC Tetracycline Hydrochloride Intravenous

Infectious Canine Hepatitis Vaccine

Rabies Vaccine AVIANIZED (R) (Modified Virus)

Anti-Feline Distemper Serum Feline Distemper Vaccine CARICIDE (R) Tablets

Diethylstilbestrol Solution Brucella Abortus Vaccine

Anti-Canine Distemper Serum & Anti-Infectious Canine Hepatitus Serum Canine Distemper Vaccine AVIANIZED (R)
(Modified Live Virus)

Additional products to be added to the line will be announced as they are available.

The Lederle Professional Veterinary Line is packaged in a distinctive red and white carton. Vials and bottles have removable labels for dispensing purposes.

Febrile Antigens

Five Febrile Antigens have been placed on the market by Lederle Laboratories Division, American Cyanamid Company. These bacterial serodiagnostic slide test antigens are additions to the group of six already marketed by Lederle, and include: Paratyphoid C antigen, Salmonella Group A antigen (Somatic I, II, XII), Salmonella Group B antigen (Somatic I, IV, V, XII), Salmonella Group C antigen (C1 and C2) (Somatic VI, VII, VIII), Salmonella Group E antigen (E1, E2, E3) (Somatic III, X, XV).

Each antigen is packaged in individual 5 ml. vials with attached, standardized dropper and complete instructions.

New Achromycin Forms

Achromycin Intramuscular

Achromycin Intramuscular, a long awaited broad spectrum antibiotic that can be administered without undue patient discomfort or irritation at the site of the injection, is now being offered by the Lederle Laboratories Division, American Cyanamid Company.

Achromycin Intramuscular (Tetracycline HC1 Crystalline) possesses all of the outstanding advantages of Achromycin over earlier broad spectrum antibiotics such as — greater solubility, more rapid diffusion into body tissues and fluids, rare occurrence of side

effects; in addition to rapid therapeutic action via the intramuscular route. Clinical studies have shown that where oral medication is not practical, effective therapeutic blood levels are readily obtained with Achromycin Intramuscular.

Active against a wide range of Gram positive and Gram negative organisms, Achromycin Intramuscular is indicated for the treatment of genitourinary infections, respiratory infections, upper respiratory infections, cellulitis, meningitis, brucellosis, pertussis, gonorrhea and amebiasis. Where previous intramuscular preparations of antibiotics have caused some patient discomfort—pain and induration can be avoided with Achromycin Intramuscular by deep injection into the Gluteal muscle.

The product is available in 100 mg. vials.

Achromycin Ointment

Achromycin Hydrochloride Tetracycline HC1 Crystalline Ointment, for topical application, has been placed on the market by Lederle Laboratories Division, American Cyanamid Company. The product contains 3 per cent of tetracycline hydrochloride in a petrolatum-wool fat base.

Achromycin ointment is indicated for the treatment of superficial infections of the skin and for the prevention of infection in wounds, abrasions and after surgery. Available in ½ oz. tubes.

Achromycin tablets

Soluble tablets of Achromycin (tetracycline HC1 chystalline) have been placed on the market by Lederle Laboratories Division, American Cyanamid Company.

Achromycin soluble tablets are the latest addition to the large family of Achromycin preparations that have been proven effective against a wide range of both Gram positive and Gram negative organisms with a minimum of side effects.

Each Achromycin soluble tablet contains 50 mg. of tetracycline HC1 and may be dissolved in bland or flavored liquids for oral administration. The tablets are packaged in tubes of 40 and 100.

New Ilotycin Preparation

Eli Lilly and Company now offers Ophhalmic Ointment 'Ilotycin' (Erythromycin, Lilly), Crystalline, 5 mg. per Gm.

This new addition to the 'Ilotycin' family of products has been clinically demonstrated to be effective against virtually all grampositive organisms and many of the gramnegative organisms which might cause infection in the eye.

The clinical trials indicate its value in acute and chronic conjunctivitis, keratitis, dacryocystitis, Meibomitis, marginal blepharitis, corneal ulcer, and ophthalmia neonatorum (for prophylactic use).

In the treatment of external ocular infections, Ophthalmic Ointment 'Ilotycin' should be applied directly to the infected structure one or more times daily, depending on the severity of infection.

The ointment comes to the pharmacist in packages containing a dozen ½-ounce tubes.

Pro-K-Mycin

Pro-K-Mycin, a combined penicillin and dihydrostreptomycin antibiotic, has been placed on the market by Lederle Laboratories Division, American Cyanamid Company.

Pro-K-Mycin is indicated in the treatment of mixed infections caused by Gram-positive and Gram-negative organisms susceptible to both penicillin and dihydrostreptomycin, such as acute gonococcal infections and infected wounds.

Pro-K-Mycin is supplied in single dose vials and is easily prepared by the addition of Water for Injection U.S.P. or Sterile Isotonic Sodium Chloride Solution for Parenteral Use U.S.P. Each dose contains the following:

Crystalline Procaine Penicillin G 300,000 Units

Buffered Crystalline Potassium Penicillin G 100,000 Units

Dihydrostreptomycin Sulfate 0.5 Gm.

Donnagel

Description: Donnagel is a comprehensive antidiarrheal, combining the Donnatal formula with kaolin, pectin and dihydroxy aluminum aminoacetate in an exceptionally smooth and palatable suspension. Each 30 cc. (1 oz.) contains: hyoscyamine sulfate 0.1037 mg., atropine sulfate 0.0194 mg., hyoscine hydrobromide 0.0065 mg., phenobarbital (¼ gr.) 16.2 mg., kaolin (90 gr.) 6.0 Gm., pectin (2 gr.) 130.0 mg., dihydroxy aluminum aminoacetate (7½ gr.) 0.5 Gm.

Action and Indications: In the treatment and alleviation of specific and non-specific diarrheas of organic or functional nature, Donnagel provides the adsorptive and detoxifying properties of kaolin and pectin, the de-

mulcent-antacid effects of dihydroxy aluminum aminoacetate, and the superior spasmolytic-sedative action of the natural belladonna alkaloids and phenobarbital as in Donnatal. The Donnatal component controls hypermotility and hypersecretion in the gastrointestinal tract, and assures successful therapy even in diarrheas of "emotional" origin. Donnagel is also effective in gastritis, enteritis, colitis and acute gastrointestinal upsets. It is helpful in the control of nausea which may accompany these conditions.

Dosage: Adults: for diarrheas, 2 tablespoonfuls at once and 1 or 2 tablespoonfuls after each stool; for other conditions, 1 tablespoonful every 3 hrs. as necessary. Children: 2 teaspoonfuls at once and 1 or 2 teaspoonfuls thereafter as above.

Available: Pale green, aromatized suspension in 6-oz. amber bottles.

Source: A. H. Robins Co., Inc. Richmond 20, Va.

Steri-Vial Ambodryl Hydrochloride

What the Product Is — An aqueous solution of the antihistamine, Ambodryl Hydrochloride, for parenteral use.

What It's For — General antihistaminic therapy, acute allergic states for immediate relief, and those patients not responding quickly enough to oral forms of antihistamines.

How Supplied — In individual 10-cc. Steri-Vials (rubber diaphragm-capped vials) containing 5 mg. Ambrodryl Hydrochloride per cc. in aqueous diluent.

Who Supplies It — Parke, Davis & Company.

Sandril (Reserpine, Lilly)

Eli Lilly and Company clinicians are investigating new uses of reserpine, which the company now is marketing under the trade-mark 'Sandril' (Reserpine, Lilly).

Preliminary clinical studies indicate that the drug, well known for its hypotensive action, may well have a place in the treatment of many other conditions. Among these are:

- 1. Psychiatry To reduce anxiety and fears, overcome timidity, and improve the ability to adjust to environmental stress.
- 2. Gynecology For its beneficial effect during the menopause, and in the treatment of premenstrual tension.
- 3. Geriatrics To overcome emotional problems and nervousness associated with old age.

Clinical findings indicate that 'Sandril' produces best results as a hypotensive agent in mild to moderate hypertension. The starting dosage is one tablet twice daily—morning and evening. Each tablet contains 0.25 mg. and is half-scored for convenience in adjusting doses. Most cases of hypertension are controlled successfully by a regimen of three tablets daily.

In severe essential hypertension, 'Sandril' is being used as an adjunct to other hypotensive agents. Preliminary clinical studies indicate that 'Sandril,' administered in conjunction with 'Provell Maleate' (Protoveratrine A and B Maleates, Lilly), another cystalline alkaloid, is the therapy of choice in controlling this type of high blood pressure.

'Provell Maleate' lowers arterial pressure by its action on the central nervous system. It is not associated with an undesirable fall in blood pressure when the patient rises to an upright position.

When both 'Sandril' and 'Provell Maleate' are given, clinical investigators have observed that smaller daily dosages may be used. This is of importance in the treatment of severe essential hypertension in which the maximum blood pressure lowering effect of the veratrum alkaloid is desired. A significant reduction can be expected in the incidence of side effects that have been observed at the high dosage levels.

'Sandril' comes in packages of five bottles, each containing 100 tablets, and in a larger bottle containing 1,000 tablets.





copies VERY PERSONALLY YOURS

☐ Physiology Chart ☐ Teaching Guide

Name_____

Organization_____

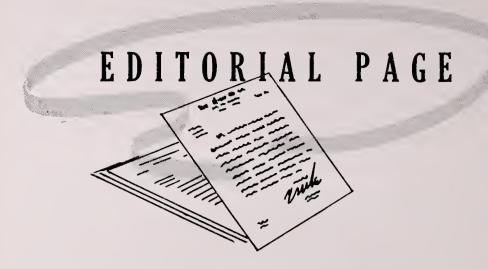
Zone____State_____

T. M. REG. U. S. PAT. OFF.

10-Minute All-Color Film . . . "The Story of Menstruation," produced by Walt Disney Productions, is acclaimed across the nation by educators, health authorities, parent and church groups. Here the once "taboo" subject is approached in a calm, straightforward manner. Complete with sound. 16 mm., full color. Free, except for postage, on short-term loan.



Teaching Guide and Menstrual Chart. Hundreds of teachers aided in developing the Guide. It is flexible, can be adapted to any teaching condition. The large color chart on menstrual physiology is designed for supplementary classroom lectures. Menstruation is detailed in easy-to-follow diagrams.



MISINFORMATION ABOUT HOSPITAL PHARMACY

Numerous inquiries have been received at the office of the American Pharmaceutical Association about the practice of pharmacy in hospitals, following publication of an article in a Washington newsletter which was reprinted in whole or in part in some state and other pharmaceutical publications under the headline "Federal Law Does Not Require Hospitals to Hire Pharmacists."

Inquiry in places from which this information was alleged to have emanated and a careful reading of what was published indicate that this was another of the type of publications in which facts were slanted to make headlines which could be interpreted by the uninformed in a number of ways. To keep the record straight, the Journal of the American Pharmaceutical Association (Practical Pharmacy Edition) has published the following editorial on the subject under the heading "Misinformation about Hospital Pharmacy:"

"The U. S. Food and Drug Administration has been quoted in several places as announcing that hospitals are not required to employ pharmacists.

"Those concerned should note in the first place that the Federal Food and Drug Administration has no authority whatever to determine whether a hospital should or should not employ a registered pharmacist. This is a matter of hospital policy and state law.

"Where a hospital is too small to operate a pharmacy under the supervision of a registered pharmacist, prescription service is supplied by arrangement with privately conducted pharmacies outside of the hospital, which operate in accordance with state pharmacy laws.

"It is a well-known fact that hospitals which operate pharmacies must comply with the same regulations governing the practice of pharmacy in the state in which they are located as apply to other pharmacies in such states. It is a distinct disservice to the public, to hospital administration, and to American pharmacy, for anyone in a responsible position or conducting a responsible publication to mislead people into believing that hospital service for the American people has retrogressed to the point where pharmaceutical service can be given by anyone who is not qualified by education and by law to supply such service.

"The plain facts are that any pharmacy located in a hospital which pretends to give adequate hospital service must be operated at all times under the supervision of a registered pharmacist. There are of course provisions for emergency service under the direct supervision of a physician as is the case in the practice of medicine generally.

"Those responsible for the misinformation inspired by such headlines as 'Federal Law Does Not Require Hospitals to Hire Pharmacists' should correct it."

FAIR TRADE BALANCE SHEET

Pluses for fair trade continue to outweigh minuses. Latest judicial victory has come from Federal Judge J. Skelly Wright of the U. S. District Court in New Orleans in the first definitive ruling on fair-traded prescription drugs.

In the case of Hoffmann-LaRoche, Inc. vs. Schwegmann Bros., he handed down on June 14 a decision upholding the application of fair trade to trade-marked prescription items when specified either in the doctor's prescription or by the customer. Removing the trade-mark or label of such an item "at the time of sale" is no defense for violating the fair trade price, he held.

Another victory: The Delaware State Court unanimously upheld, for the first time, the constitutionality of that state's fair trade law and its non-signer clause in the case of General Electric Co. vs. Phil's Distributors. The Delaware State Supreme Court thus becomes the 16th high state court to uphold fair trade's constitutionality.

The N. Y. Court of Appeals, highest state court, also unanimously upheld fair trade's constitutionality this month, for the sixth time. And a lower court, the N. Y. State Supreme Court, came through with the first decision on whether a manufacturer operating retail stores could fair-trade. The court said yes.

Down in Louisiana, fair trade's arch enemy Super Marketeer Schwegmann bit the dust, too, on the legislative front. His "free-lunch, free-ride, housewife-holiday" campaign to repeal the state's fair trade law came a cropper. Fair trade and its friends won hands down when the State Legislature's House Judiciary Committee voted 12 to 0 against repeal.

The Bureau's new study, "Fair Trade And Newspaper Advertising," reveals that effective fair trade stimulates more newspaper advertising by department stores and national brand manufacturers. It also shows that a decrease in such advertising accompanies the absence of effective fair trade. Dr. John W. Dargavel, executive secretary of the National Association of Retail Druggists and Bureau chairman, writes in his introduction:

"The study confirms statistically the views of many manufacturers and retailers that price advertising of trade-marked products becomes a sitting duck for those whose merchandising consists of price-cutting."

A minus for fair trade was the adverse lower court ruling in Arkansas in the case of Union Carbide and Carbon Corp. vs. White River Distributors. State Chancery Court Judge P. S. Cunningham held that the non-signer clause of the Arkansas fair trade law conflicted with the state constitution's due process provisions. An appeal to the high state court is expected.

Another minus came from the Department of Justice in a statement opposing enactment of a fair trade law for the District of Columbia. The statement, filed with the Senate District Committee now considering S. 3297, presented the traditional anti-fair trade arguments but failed to oppose all the other forms of resale price maintenance with the same economic rationale and effects as fair trade.

FAIR TRADE AND PRESCRIPTION DRUGS

Hailed as a "landmark decision," the ruling of U. S. District Court Judge Wright holds that a fair trade law cannot be circumvented by removing "at the moment of delivery" the trade-mark or label of a fair-traded, trade-marked drug either sold on prescription or over the counter when the customer requests a specific brand. The decision says:

"Upon specific request for a named Fair Traded, trade-marked product, the trademark owner's good will is involved and a retail seller may not then remove the trademark and thereby avoid liability under the Fair Trade laws.

"Awareness by the customer of the name of the drug in his prescription is not an essential factor in determining whether or not the trade name of the manufacturer is utilized in selling a Fair Traded product. The good will established in prescription drug trade-marks, brands and names is inseparably bound with prescriptions which physicians write for their patients . . .

"The mere removal by the defendants at the time of sale to a consumer, of the trademarks, labels, brands or name of the manufacturer is no defense to an action for contempt where the sale is made at less than the legally established Fair Trade price, after receipt of an order for the product by specific trade name . . . It is not essential, under such circumstances, that the product or container physically bear the trade-mark, label, brand or name of the manufacturer at the moment of delivery."

A.C.A. TO HOLD 13th ANNUAL CONVENTION IN BOSTON

A most outstanding professional program will highlight this year's Annual Convention of The American College of Apothecaries. The meeting will be held at the Hotel Statler in Boston, Massachusetts, August 22-24 and advance registrations indicate that attendance will be larger than ever before.

The program will consist of four open sessions to which all pharmacists are cordially invited, while two closed sessions will be set aside to transact the business of the College. In addition, the Annual Banquet will be held on Monday evening, August 23rd at the Parker House Roof Garden, at which time the J. Leon Lascoff Memorial Award will be presented to Leslie M. Ohmart for his outstanding achievements in the advancement of professional pharmacy. The evening will also be marked by an address from the Governor of the Commonwealth of Massachusetts, The Honorable Christian A. Herter. All pharmacists and their wives are invited to attend the Banquet, which will be in the famous New England style.

A number of prominent physicians from the medical center of Boston have been selected to present two most interesting professional sessions. These include Dale G. Friend, M.D., Associate in Medicine, Harvard Medical School and Senior Associate in Medicine Peter Bent Brigham Hospital who will discuss "Modern Trends in Drug Therapy;" Frank Allen, M.D. member of the Staff Lahey Clinic and Chairman, Committee on Pharmaceutical Problems, Massachusetts Medical Society who will discuss "Interprofessional Relations;" Lois K. Diamond, M.D. Associate Professor in Pediatrics, Harvard Medical School who will bring to the group his "Personal Experiences with Hematinics in Pediatric Practice," and Bernard Appel, M.D. Professor Dermatology, Tuft's Medical School and Chief, Dermatologic Service Boston City Hospital who will speak on Pharmaceutical Dermatology.

The remaining two open sessions will be devoted to discussions on prescription store operation and promotion with frank and open discussions on many of the economic problems facing the pharmacist. A wealth of practical and helpful information have been

crowded into the four open sessions and all are sincerely invited to attend. Information which should prove valuable to every pharmacist.

(Continued from Page 288)

In 1952 there were 9 known addicts among pharmacists.

In 1953 the total dropped to 5.

That record of the Bureau of Narcotics testifies to the caliber of the people identified with pharmacy. Miss Kilgallen, to be fair, must make every effort to undo the harm she has done to the pharmacists of the country."

In the coming August 7 issue of the Saturday Evening Post, I am advised the N.A.R.D. will have a message to sell the people of your community the great service of professional pharmacy. Out of a 4,000,000 circulation of this great weekly, many of these copies will reach your neighbors and customers. This is actually and truthfully local advertising only if you are well identified with it.

All of this will build prestige for you and your store. The cost is small; the value, I believe, will be great.

In closing, I want to say "Thank you" to all of the association officers for the splendid cooperation they have shown. And I wish to express my thanks to Willis Hodson and all of the Aberdeen druggists, the Allied Drug Travelers, Wholesalers and Manufacturers, and all local committees for their efforts in planning what we feel will be a fine Convention.

To every member of the Association present, I say "Thanks for coming," and especially to those of you who brought your wives. They are interested in our work and have shown a fine spirit of cooperation by their help both in the stores and out. They are to be commended by furthering interest in our State Pharmacy School for the girl students of pharmacy by promoting an annual Merit Award of \$25. This I understand compares very favorably with similar awards offered by other State Pharmaceutical Association Auxiliaries. May their good work continue.

When all is said and done, I feel my effort put forth has been very small in comparison to the experience I have gained by heading the Association this past year. THANK YOU.

PHARMACY Rews

Sixty-Eighth Annual Convention Has Record Attendance

A record out of town attendance was chalked up at the 68th Annual South Dakota State Pharmaceutical Convention in Aberdeen, June 20-22. Approximately 240 retail pharmacists, wholesalers, manufacturers representatives and pharmaceutical educators from all corners of South Dakota met to renew friendships, exchange trade talk and conduct convention business.

The program opened Sunday, June 20, with an afternoon of sports and recreation at the various parks and recreational centers of Aberdeen. A full evening's entertainment of dancing and refreshments at the Allied Drug Travelers Party and Smorgasbord Supper in the Alonzo Ward Hotel Ballroom climaxed the day.

The opening general session of the convention was called to order Monday morning, June 21 by President Neil Fuller, Chamberlain, S. Dak. Following the Invocation by Dr. Herbert Kann, Pastor of the Presbyterian Church, greetings of welcome were extended by

Mayor Ernest Gunderson for the City of Aberdeen, Willis Hodson for the Aberdeen pharmacists, Dr. J. C. Rodine for the Aberdeen physicians and Cliff Sumption for the Allied Drug Travelers.

Dr. Kann conducted the Memorial Hour. Departed pharmacists reported to the Secretary during 1953-54 are Dave Goldman, Omaha, Nebraska; Horace Kress, Mitchell: William Bissell, Plank-William Bockoven. inton: Clark; Frank Fox, Emory; Frank Bockoven, long-time treasurer of the South Dakota State Pharmaceutical Association, Clark; Wilber B. Burgeson, Sioux Falls; Charles Kent, Huron; and Frank Kreibs, Sioux Falls.

The President's address, an address by Dr. G. C. Gross of the Division of Pharmacy, South Dakota State College and the reports of the Association officers and committees completed the first business session. Mr. Fuller's address is printed in this issue.

The Drug Wholesalers Luncheon was held Monday noon at the Aberdeen Country

Club, following which the members enjoyed a talk by Dr. Lawrence W. Price, Associate Director, Veterinary Professional Services, Lederle Laboratories and a discussion on pharmacy laws by Herman S. Waller, Attorney for the National Association of Retail Druggists.

The Annual Pharmaceutical Association Banquet was held Monday evening at the Country Club. Mr. York Langton, Regional Vice-President of the American Association for the United Nations, spoke on the topic "Your Stake in the United Nations." An evening of entertainment and dancing followed.

The final business session was held Tuesday morning and included an address by Dr. Harold Bailey, Division of Pharmacy, South Dakota State College, and Mr. Robert Buchanan, General Manager, Northwestern Drug Co. Reports of the various convention committees were prevoted on two amendments to sented and the delegates the Constitution and several important resolutions.

1954 Proposed Constitutional Amendments

1. Article IV, Section 2. "The elective officers and immediate past president

shall be the directors and constitute the Executive Committee of this association."

This proposed amendment lost 51 to 10 and Article IV, Section 2 remains:

"ARTICLE IV — OFFICERS AND COMMITTEES, SECTION 2. The elective officers, immediate past-president and the members of the Board of Pharmacy shall be the directors and constitute the Executive Committee of this association."

2. Article VI, Section 2. "Special meetings shall be called by the president upon written request of fifty members, or by action of the Executive Committee. The notice shall state the object of that meeting, and no other business shall be transacted at that meeting. The Secretary shall give ten day's notice of all special meetings."

This proposed amendment was adopted by the Convention.

1954 Convention Resolutions
1. WHEREAS: The National
Association of Retail Druggists has passed a resolution
opposing the extension of a
four year course in pharmacy; therefore,

BE IT RESOLVED, that our association support their resolution.

2. WHEREAS: The issuance of trading stamps by drug stores is detrimental to the profitable operation of said stores; and,

WHEREAS: It is questionable if such drug stores are living up to their fair trade agreements, therefor,

BE IT RESOLVED, that this association go on record as opposing the use of trading stamps for business promotion.

- 3. RESOLVED, that South Dakota druggists write their Senators Case and Mundt asking their support of fair trade legislation for the District of Columbia.
- 4. RESOLVED, that our association go on record as opposing the transfer of the Division of Pharmacy to the College of Medicine at the University of South Dakota, as recommended by Griffenhagen and Associates.
- 5. RESOLVED, that this association compliment Dr. Harold Bailey on his fine work as Associate Editor of the South Dakota Journal of Medicine and Pharmacy and that he be continued as editor at a salary recommended by the executive committee.
- 6. WHEREAS, the future of pharmacy in the state of South Dakota depends a great deal on the laws we may pass, therefor,

BE IT RESOLVED, that each and every druggist should make an effort to become better acquainted with their Senators and Representatives and take a more active part in state politics.

- 7. RESOLVED, that the immediate past president of the association be included on the resolutions committee.
- 8. WHEREAS, modern methods of merchandising present a threat to the public health and safety in the unlimited and unrestricted retail sale of packaged drugs and medicines; and,

WHEREAS, the public health and safety can be adequately protected only by restricting the retail sale of packaged drugs and medicines to persons who know that threat; therefor,

BE IT RESOLVED, that this association request the Board of Pharmacy to formulate regulations governing the retailing of packaged drugs and medicine within the registered pharmacies of this state.

- 9. RESOLVED, that this association extend a vote of thanks to Willis Hodson and all the Aberdeen druggists and wives who made this convention an outstanding success.
- 10. RESOLVED, that our association extend a vote of thanks to the Jewett Drug Co., Northwestern Drug Co., McKesson and Robbins of Minneapolis, Sioux City and Omaha, and Brown Drug Co. for their splendid refreshments and dinner.
- 11. RESOLVED, that this association extend a vote of thanks to all the manufacturers and wholesalers who contributed prizes and cash to this convention.
- 12. RESOLVED, that we extend a vote of thanks to the Allied Drug Travelers for their fine dinner and dance on Sunday.
- 14. RESOLVED, that the association extend a vote of thanks to the Lederle Company for furnishing Dr. Price as a convention speaker.
- 14. RESOLVED, the the association extend a vote of thanks to the National Association of Retail Druggists for furnishing Herman S. Waller as a convention speaker.

CHARLES F. VAN de WALLE ELECTED PRESIDENT

Charles F. Van de Walle, Sioux Falls, was elected President of the South Dakota State Pharmaceutical Association at the annual meeting in Aberdeen. Mr. Van de Walle has been active in the affairs of Association for a number of years including several as an Associate Editor, South Dakota Journal of Medicine and Pharmacy.

The other elected officers of the Association for the year 1954-55 are Edward W. Peterson. Elk Point, First Vice President; Algar D. Knutson. Clark, Second Vice President; George Lehr. Rapid City, Third Vice President; Vere Larson. Alcester, Fourth Vice President; John Burke. Mitchell, Treasurer and Bliss C. Wilson. Pierre, Secretary.

OLDEST PHARMACIST IN SOUTH DAKOTA SUCCUMBS

Holland Wheeler, 88, oldest pharmacist in South Dakota, died July 15 in St. John's Hospital, Huron.

Wheeler founded the Wheeler Drug Store in Huron in 1890.

The original State Board of Pharmacy was organized in his store. Mr. Wheeler was one of the first druggists to be registered in the State. He held registration No. 36.

The store is now operated by his brother, John, and John's son, Kirke, and daughter, Allison.

PHARMACY STAFF MEMBER TO ATTEND NATIONAL SEMINAR

Professor Guilford C. Gross of the South Dakota State College pharmacy staff will speak at the Sixth Annual Teachers' Seminar on Pharmaceutical Education to be held at the University of Connecticut, August 15 to 21.

Sponsored jointly by the American Association of Colleges of Pharmacy and the American Foundation for Pharmaceutical Education, the Seminar meets yearly to consider methods of improving instruction in the various areas of pharmaceutical education.

Professor Gross will deliver two papers entitled "How I Evaluate the Progress of the Student in Pharmacy" and "How I Effectively Use a Quiz or Discussion Section in Pharmacology." He will also lead group discussions on the two topics.

The Connecticut Seminar is the fifth Teacher's Seminar which has been attended by one or more members of the pharmacy staff at State College.

DR. FLOYD J. LeBLANC COMPLETES WALGREEN SEMINAR

Dr. Floyd J. LeBlanc of South Dakota State College Pharmacy Division has a wealth of information to offer his students in pharmacy administration this fall . . . information gained at Walgreen's 1954 Seminar in Drugstore Management.

Held at the firm's Chicago headquarters, June 21 — July 14, the Seminar afforded LeBlanc, and representatives from ten other major phar-



macy colleges, a month's onthe-scenes experience in Walgreen operations and stores.

Purpose of the Seminar—the second such program sponsored by Walgreen's—is to enable pharmacy colleges to study progressive drugstore management at close range in line with their increasing emphasis on basic business fundamentals in the classroom.

Thirty-seven different business subjects ranging from personnel training to departmental merchandising were thoroughly explored in discussions led by experienced, veteran Walgreen Department heads. Field trips into company stores and other facilities supplemented the meetings.

In his welcoming address to Seminar delegates, C. R. Walgreen, Jr., president of the firm, pointed out that a clearer picture of the modern druggist's problems and needs cannot help but aid pharmacy colleges to produce graduates better fitted for success in today's retail drug business.

N.A.R.D. CONVENTION

The 56th Annual Convention of the N.A.R.D., to be held in Houston, Texas, Oc-

tober 10 through October 14, will be attended by a large number of the retail druggists of America.

Final preparations for the Convention are being completed and the Convention will include an excellent program of speakers, enjoyable entertainment and many special events. The Harris County (Texas) Pharmaceutical Society is the host of the Convention. The business sessions and the Drug Show will be held in the Sam Houston Coliseum.

The business sessions of the program have been carefully planned to provide information of vital importance to the independent retail druggists. Theme of the Convention will be "Keep Ahead of the Merchandising Parade by Selling." Legislative matters will be discussed . . . the Robinson-Patman Act . . . Fair Trade . . . and other legislation important to the welfare of pharmacy.

Speakers of nationwide prominence have indicated acceptance of invitations to address the Convention. Also on the program will be many leaders in the drug field. Together they will discuss every aspect of drug store operation.

Congressman Sam Rayburn, Democratic Leader of the House of Representatives, will speak on Wednesday, October 13. His message will certainly be one that druggists should not miss.

Congressman Rayburn has been a prominent member of Congress for years. After serving six years as a member of the Texas Legislature, (the last two years as Speaker of the Texas House of Rep-

resentatives) he was elected to the U.S. Congress. He served as majority leader in the 75th and 76th Congress; elected Speaker on September 16, 1940 (to fill out the unexpired term of the late Speaker William B. Bankhead); reelected Speaker of the 77th, 78, and 79th Congress; Speaker of the 81st Congress and reelected Speaker on January 3, 1951. He was elected Democratic Leader of the 83rd Congress on January 3, 1953. Congressman Rayburn has served as Speaker over a longer period than any member of Congress.

The Honorable C. W. Crawford, Commissioner of Food and Drugs, Department of Health, Education and Welfare, has also accepted an invitation to speak during the business sessions of the Convention. Mr. Crawford is an authority on federal drug law and his message is sure to be a valuable one for the retail druggists.

For many years, Mr. Crawford has devoted much of his time to drafting food and drug regulations and standards. He was F.D.A.'s principal representative in discussions with legislative advisors and members of Congress who wrote the Federal Food, Drug and Cosmetic Act. He has been in government service for 37 years. Mr. Crawford was appointed Commissioner of Food and Drugs following the retirement of Dr. Paul B. Dunbar on May 31, 1951.

J. J. Toohy, executive vice president of E. R. Squibb and Sons, has also accepted an invitation to address the Conventon. Mr. Toohy is well known in the drug field and is a champion of the independent druggist. He can be counted on to speak on matters of vital importance.

E. Allen Newcomb, executive secretary of the National Wholesale Druggists' Association, will also address the Convention. Mr. Newcomb is a member of the steering committee of the Bureau of Education on Fair Trade.

It appears that the Drug Show of 1954 will be one of the largest in the history of the N.A.R.D. The original plan called for 222 booths. The space was sold in about a month and 32 booths were added to provide more space exhibitors. The 1954 Drug Show promises to be more colorful and more educational than the Drug Shows of the past. Also, more products than ever will be exhibited.

The variety of the entertainment program has been selected to appeal to everyone. There will be the stars of radio and TV . . . vocal artists . . . comedy . . . instrumentalists . . . choral groups . . . all carefully chosen from rated talent to provide you with fun at Houston. Then, for the ladies, a special program is being planned . . . tours to important places in Houston . . . luncheons . . . theater parties . . . fashion shows . . . there will not be a dull moment during the N.A.R.D. Convention at Hous-

Houston has been made great through rich natural resources. The city is served by six trunkline railroad systems, an inland seaport, the intracoastal canal, many truck and bus lines, a network of excellent state and federal highways and six domestic and three international airlines. The weather in October is pleasant with daily maximum temperatures around 75 degrees.

Among the points of interest are the Houston Ship Channel, San Jacinto Battleground and Monument, the Museum of History, the Museum of Fine Arts, the Municipal Zoo, the Garden Center and Museum of Natural History, the Texas Medical Center, nearby oil fields and petroleum refineries and recreatonal facilities including 62 parks and numerous playgrounds. Moored at the San Jacinto Battleground and open to visitors is the U.S.S. TEXAS, the only survivor of the dreadnought class, a veteran of two world wars and a dozen campaigns. The battleship was presented to the State of Texas by the United States Navy.

It is imperative that members planning to attend the 56th Annual Convention of the N.A.R.D. at Houston make hotel reservations as soon as possible. Hotel space is limited and better accommodations are available to those who register early.

Assure yourself of the accommodatons you want by sending in your hotel reservations now to the N.A.R.D. Housing Bureau, P. O. Box 2371, Houston, Texas. The following is a list of the official convention hotels in Houston: Auditorium, Ben Milam, Lamar, Lamar Annex, Milby, Montagu, Plaza, Rice, Sam Houston, Shamrock, Texas State, Warwick

and Wm. Penn. There is no headquarters Hotel.

FIRST REPORT ON DAR-GAVEL FOUNDATION: 507 CONTRIBUTORS GIVE \$39,188

A total of \$39,188.50 has already been contributed, in advance of a fund-raising drive, by 507 manufacturers, wholesalers and retailers to the John W. Dargavel Foundation, according to the first report on the Foundation issued by Albert C. Fritz of Indianapolis, chairman of the fund-raising committee and a past president of the National Association of Retail Druggists.

Incorporated in the State of Illinois as a non-profit corporation, the Foundation will "help individual retail druggists cope with serious reverses of misfortune and make loans available to students of pharmacy in need of such assistance." It bears the name of N.A.R.D.'s executive secretary.

The plan of the Foundation calls for a capital fund of \$250,000 to be accumulated through contributions of \$100,000 from retail druggists and \$150,000 from drug wholesalers and manufacturers.

Mr. Fritz disclosed that 10 manufacturers have contributed a total of \$10,710; 16 wholesalers have contributed \$9,025, and 481 retailers have contributed \$19,453.50. In addition, a number of pledges have been made which are not included in the totals.

"It is significant," Mr. Fritz said, "that contributions to the John W. Dargavel Foundation should already

total almost \$40,000, despite the absence of any organized effort to raise funds. It seems to me that the spontaneous response of so many is a sure indication of the ultimate success of the fund-raising effort. In fact, I am sure that the whole \$250,000 will be raised by the time of the N.A.R.D. annual convention in Houston in October."

Noting what response might be expected when the organized campaign gets under way — "within the next few weeks" — Mr. Fritz said that his own state, Indiana, where he has been conducting a campaign on his own, has already contributed \$10,835. "If other states come close to matching our response," he said, "I am sure the retail quota of \$100,000 will be exceeded."

The John W. Dargavel Foundation was established in conformity with a resolution adopted at the convention of The National Association of Retail Druggists held in St. Louis in 1952 to memorialize "the name, spirit and accomplishments of Executive Secretary Dargavel." Thereafter, a John W. Dargavel Foundation Committee, consisting of representatives of all segments of the drug industry, was organized to develop specific objectives. These objectives were endorsed in 1953 at the convention of N.A.R.D. in Chicago through approval of a report submitted by the Foundation's Committee.

Mr. Fritz was chairman, and Mr. Frank Moudry of St. Paul, Minn., also a past president of N.A.R.D., was co-chairman of that Committee.

Both are serving in the same capacity on the committee in charge of the drive to procure funds for the Foundation.

A.PH.A. CONVENTION TO BE WELL ATTENDED

The most complete gathering of pharmacists representing every phase of the profession and drug industry is scheduled for the week of August 22 at the Hotel Statler in Boston, Mass.

Meeting with the American Pharmaceutical Association will be the American Association of Colleges of Pharmacy, the National Association of Boards of Pharmacy, the American Society of Hospital Pharmacists, the American College of Apothecaries, and the National Conference of State Pharmaceutical Association Secretaries. These organizations, together with the House of Delegates of the A.Ph.A., constitute a complete cross section of all phases of pharmacy and bring together in one week the leaders of the profession and industry for the discussion of their scientific, economic and social problems and relationships to other groups in the healing arts and in the domain of public welfare.

The colleges of pharmacy, now numbering 74 accredited institutions, will open their sessions on Sunday, August 22, and continue through Tuesday, August 24. The National Association of Boards of Pharmacy, representing the licensing and examining boards who also enforce the pharmacy statutes of the various states, will hold ses-

sions beginning on Monday, August 23, and continuing August 24.

The Conference of State Pharmaceutical Association Secretaries will be in session beginning Saturday, August 21, and continuing throughout the convention week.

The American Society of Hospital Pharmacists and the American College of Apothecaries also open their meetings on August 22 and continue through August 24.

The first session of the House of Delegates begins late Tuesday afternoon, August 24. Subsequent sessions will be held on Wednesday morning, Friday morning and afternoon, and Friday evening.

General sessions of the convention will begin on Tuesday evening, August 24, and subsequent sessions will be held Thursday morning, August 26, and Friday evening, August 27.

In announcing the time and program for the meeting, President F. Royce Franzoni of Washington, D. C., stated that this convention will undoubtedly come to grips with some of the most important problems facing the profession and every effort will be made to meet current issues which affect the industry and the profession in the statesmanlike manner which has been characteristic of the Association's activity for more than a century.

Advance registrations for the 101st convention of the American Pharmaceutical Association indicate that this will be one of the best attended meetings in the Association's history.



33 years ago they told me:

"YOU HAVE LESS THAN A YEAR TO LIVE!"

"MUST HAVE BEEN back in 1919 or '20. Hopeless case of diabetes. No known cure . . .

"BUT HERE I AM. They found a treatment—insulin—in time. Today, nobody has to die of diabetes.

"CANCER, I know, is a tougher problem. But the laboratories can lick that one, too—with our support. Already, they're curing people who would have been done for a few years ago. Last year—thanks to \$5,000,000 allocated by the American Cancer Society from our contributions—they found out a lot more . . . though there's still a long way to go.

"THEY NEED MONEY, though. \$5,000,000 is still less than 4 cents per American per year. Not enough. Not enough to find the answer fast enough—230,000 Americans are going to die of cancer this year, they say.

"I'M NOT RICH, but I gave 'em \$50 last year—hope to do better this time. After all, where would I be if the laboratories working on diabetes, that time, hadn't been given enough support—?"

Cancer
MAN'S CRUELEST ENEMY
Strike back—Give



DIFFERENTIAL DIAGNOSIS AND TREATMENT OF BENIGN LESIONS AT THE CARDIOESOPHAGEAL JUNCTION* by W. E. ADAMS, M.D. Chicago, Illinois

With the development of safe and reliable methods of attack on the esophagus by surgery, there has been renewed interest in the management of benign lesions of that organ. This has stimulated extensive studies of the normal and pathological physiology of the esophagus which has resulted in a better understanding of various aspects of these lesions. Barrett¹ in 1950 presented an excellent review of this problem and along with others has contributed much to the clarification of the subject which has been much misunderstood.

The subjects of this discussion consists of four of the more common benign lesions of the cardioesophageal junction, i.e., (1) short esophagus with thoracic stomach, (2) achalasia of the esophagus, (3) peptic esophagitis with stricture and (4) benign tumor. In addition, two other conditions are included which must be considered in differential diagnosis. Three of these are illustrated in Figure I. The x-ray appearance of the cardio-esophageal junction in peptic esophagitis is sometimes quite similar to that seen in a mild degree of achalasia. Occasionally carcinoma of the esophagus at that level will present a similar appearance. Endoscopy, biopsy and cytological studies may be needed for differentiation.

From the Department of Surgery of the University of Chicago.

The symptoms produced by these lesions in all except benign tumors of the muscular wall of the organ, are directly or indirectly related to the peptic acid action of the gastric juice on the mucous membrane of the lower esophagus. This paper will not deal with those cases of peptic esophagitis which result from long periods of regurgitation following operation or during some chronic illness. The regurgitation of gastric juice in the conditions to be discussed is largely due to a deficiency of the sphincter like mechanism at the cardioesophageal junction. In the case of achalasia the congenital defect is not limited to the lower end of the esophagus but extends throughout most of its length and is neurogenic in nature. Table I lists the conditions to be discussed along with two others which are considered in differential diagnosis. It is noted that the symptomytology of these conditions play a major part in diagnosis. Although there is no universal agreement regarding the congenital versus acquired theory as to the etiology of shortening of the esophagus with peptic esophagitis, the fact that a larger majority of these cases are accompanied by a defect at the hiatus of the diaphragm would strongly suggest a developmental origin.

Like duodenal ulcer, patients with peptic esophagitis manifest the ulcer forming diathesis. Thus, many of these patients either have or have had ulcers of the duodenum in the past. It is well known that a large percentage of patients with achalasia and peptic esophagitis may be managed successfully by

^{*} Presented at the 1954 Association Annual Meeting, Huron, South Dakota.

LESIONS AT THE ESOPHAGOGASTRIC JUNCTION DIFFERENTIAL DIAGNOSIS

	Symptoms		
Lesion	Pain	Dysphagia	Hemorrhage
SHORT ESOPHAGUS with Thoracic Stomach	±	±	±
ACHALASIA	+	+	-
PEPTIC ESOPHAGITIS with Stricture	+	+	±
LEIOMYOMA	-	-	-
HIATUS HERNIA	±	±	±
CARCINOMA OF ESOPHAGUS	<u>+</u>	+	-

Table I. The symptomytology produced by lesions at the cardioesophageal junction aids materially in differential diagnosis. Note that with the exception of leiomyoma, most lesions produce some difficulty in swallowing. Pain is a variable symptom and may be produced by all lesions except leiomyoma. Hemorrhage is not uncommon in the case of short esophagus with peptic esophagitis or peptic esophagitis alone with ulcer and stricture.

non-surgical means. A thorough understanding of the normal and pathological physiology of the esophagus was delayed until relatively recent years and thus operative procedures which overcame obstruction at the cardioesophageal junction but created a free passageway between these two organs led to highly unsatisfactory results in a high percentage of patients. For this reason many patients have been maintained on non-surgical treatment for longer periods of time than would be the case if surgical treatment in the past had been more successful in eliminating their symptoms. At the present time the principle indications for surgical intervention are as follows: 1. Persistent obstruction which cannot be satisfactorily managed by repeated dilitation, 2. Severe pain (intractable) which is difficult to control with diet and antacid therapy, 3. Excessive bleeding, and 4. Evidence of perforation of an ulcer of the lower esophagus.

Although the physiologic basis for the symptomatology in the case of achalasia is entirely different from that of peptic esophagitis, previous surgical procedures for its alleviation have frequently led to the symptoms of this condition. Thus, it should be included in this discussion. Since primary carcinoma located at the cardioesophageal junction produces symptoms and especially x-ray findings not unlike some benign lesions in this area it is also included for differential

diagnosis. Likewise, since there are at times some difficulty in differentiation between hiatal hernia and peptic esophagitis, especially with shortening of the esophagus it is also included for consideration. (See Figure I).

BENIGN LESIONS AT THE ESOPHO-GASTRIC JUNCTION



SHORT ESOPH. ACHALASIA PEPTIC ESOPH- HIATUS
WITH HIATUS OGITIS WITH HERNIA
MERNIA STENOSIS

Figure I. Diagrammatic illustration of x-ray appearance of four lesions occurring at the cardioesophageal junction. The degree of esophageal dilitation above the site of stricture in the case of achalasia may at times be much greater than that illustrated above. Note that in the case of short esophagus with thoracic stomach two points of obstruction may occur.

Physiological basis for therapy: Except in the treatment of benign tumors of the lower esophagus the basis for therapy is similar in the other three conditions. This includes 1. alleviation of obstruction, and 2. alleviation and prevention of peptic esophagitis. A number of operative techniques or combination of techniques have been devised for this purpose. In the case of achalasia either of two operative techniques may be employed according to the degree of severity of the disease as well as the age of the patient (See Figure II). For the less advanced stage, a modified Heller procedure is perhaps the operation of choice. This entails a myotomy over the dilated lower esophagus extending down over the constricted portion and on to the normal gastric wall. This longitudal incision is carried down to the mucosa, the incision through the musculative tissue being widened much the same as in a Fredet-Rammstedt Pyloroplasty. No closure is used. This allows some dilitation of the channel through the constricted area but maintains a small enough passage to prevent regurgitation of gastric contents into the lower esophagus. The second procedure, i.e., a transthoracoabdominal resection of the lower esophagus and upper stomach, vagotomy, and end to side anastomosis. By this

ACHALASIA



TRANS-ABDOMINAL HELLER CARDIOPLASTY

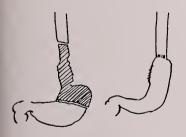
TRANS-THORACO-ABD.
GASTROESOPH.,
VAGOTOMY & GASTROENT.

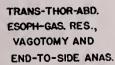
Figure II. Diagrammatic illustration of two operative techniques in the surgical management of achalasia. In the Heller operation the myotomy may be made both anterior and posterior. For more advanced lesions of this condition the alternative operation illustrated on the right, namely gastroesophagostomy, vagotomy and gastroenterostomy is recommended.

procedure the obstruction factor is eliminated and the acid pepsin factor is reduced or eliminated. In the case where no hyperacidity is present vagotomy and gastroenterostomy may be unnecessary.

Operative procedures entailed in the treatment of benign muscular tumors of the esophagus may or may not include resection of a segment of the organ. In many cases the tumor does not involve the entire circum-

SHORT ESOPHAGUS







TRANS-THOR-ABD. ESOPH-GAS., VAGOTOMY AND GASTROENT.

Figure III. Diagrammatic illustration of two operative procedures which have been found satisfactory in the surgical management of short esophagus.

stance of the esophagus and sufficient wall may remain for closure without marked constriction of the passageway. In the case of involvement over a relatively short segment of the esophagus (2 or 3 cm.) by the tumor, resection of this much of the entire circumstance with subsequent end to end anastomosis may be carried out with safety.

The following cases illustrate some of the problems involved and their management:

I. ACHALASIA.

Case \$1. Mr. A. G. \$331739. This patient was a 67 year-old male who gave a history of dysphasia of 10 years' duration. Although he had been maintained in a moderately good state of nutrition over this period of time, an x-ray of the esophagus showed marked dilitation of the organ. (The symptoms of peptic esophagitis in such cases is in part due to the stagnation of food within the organ similar to stagnation causing gastritis in high gastroenterostomy following vagotomy). Repeated dilitation gave satisfactory results.

Case \$2. R. S. \$183962. This 35 year-old white female gave a history of pain on swallowing along with belching and occasionally vomiting undigested food beginning 15 years prior to admission. At times the obstruction was so severe that she was unable to swallow saliva. Esophageal dilitation was performed many times over the ensuing years. These dilitations gave relief up to as long as one year's duration. In the few weeks before admission she experienced severe substernal pains usually coming on one-half hour after eating. At some periods during her illness weight loss was fairly severe.

X-rays following ingestion of barium showed considerable dilitation of the esophagus with a high degree of obstruction at the cardioesophageal junction (see Figure IVa). A modified Heller's myotomy through an upper abdominal approach resulted in complete relief of her symptoms. An x-ray following ingestion of barium showed a somewhat less dilated organ with a channel now visible between the esophagus and the stomach (see Figure IVb). Following the Heller myotomy type of operation a high percentage of patients will remain free of symptoms.

Case #3. R. S. #488157. This 57 year-old



Figure IVa. X-ray appearance following the ingestion of barium in a 35 year old white female who gave a history of vomiting undigested food during the previous 15 years. There had been no history of pain or hemotemsis. Note dilitation of entire esophagus with high grade stenosis at the cardioesophageal junction.

white female stated that she had had a nervous stomach for 25 years. Eighteen years prior to admission cardiospasm was diagnosed by a local M.D. on x-ray examination. Her chief symptom was obstruction which had been getting more severe just prior to admission. A weight loss of as much as 25 lbs. was experienced at one time. Vomiting after eating became excessive at times occurring almost every meal. An x-ray of the chest revealed an opacity to the right of the heart shadow into the lower right chest. Following the ingestion of barium it was noted that this shadow was caused by a marked dilation and redundancy of the lower esophagus into the right chest. Since previous treatment by dilitation had been only partially successful and because of the marked dilitation, rotation and redundancy of the esophagus surgical treatment was indicated. This consisted in a transthoracoabdominal approach with vagotomy, gastroesophagostomy and gastroenterostomy. Following operation the patient was relieved of her symptom of obstruction, although it was necessary for her to lean towards the left



Figure IVb. X-ray appearance of the chest following the ingestion of barium which was made several weeks after a modified Heller's myotomy. The operation was performed through an upper abdominal approach and resulted in complete relief of the patient's symptoms. Note reduction in the amount of dilitation of the esophagus and the narrow channel through the area of previous stenosis.

side following the ingestion of food to "empty" the esophagus into the stomach (see Figure V.) In the four years following her operation there has been no pain, bleeding or symptoms of dysphasia.

CARCINOMA OF ESOPHAGUS IN DIFFERENTIAL DIAGNOSIS

Case #4. M. E., a 57 year old white female complained of symptoms of dysphasia of 21/2 years duration. Repeated dilitation over the second year of her illness resulted in partial relief of obstruction. After this form of treatment became less satisfactory she was referred to this institution for surgical therapy. An x-ray following the ingestion of barium showed the characteristic picture presented in achalasia. An esophagoscopic examination and biopsy showed only normal mucosa. On exploration a non-resectable primary carcinoma of the lower esophagus was found invading the diaphragm and posterior parieties. As a palative procedure to relieve obstruction the fundus of the stomach was anastomosed

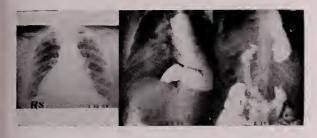


Figure V. a, b, c. a. X-ray of the chest of a 57 year old white female who was known to have achalasia of the esophagus of 18 years duration. Note projection of the esophagus to the right of the cardiac shadow suggesting the presence of a tumor.

b. X-ray appearance following the ingestion of barium. Note marked dilitation and redundancy of esophagus with marked narrowing at the cardioesophageal junction. The patient had lost as much as 25 lbs. at one time prior to admission. Vomiting followed almost every meal.

c. X-ray appearance following the ingestion of barium which was made several weeks following operation. Because of the marked redundancy of the esophagus and the poor condition of the patient, a gastroesophagostomy above the site of stenosis was made along with a vagotomy and gastroenterostomy. The patient has regained normal weight and is free of obstructive symptoms. There has been no pain or hemorrhage following operation.

to the esophagus above the site of stricture. This patient is a good example of the importance of esophagoscopic examination and biopsy (repeated if necessary) in cases which are not clearly diagnosed as achalasia of the esophagus.

II. SHORT ESOPHAGUS

Case #1. G. B. This 52 year old white female complained of intermittent nausea and vomiting of 15 years duration. She also had had some pain in the left upper quadrant and a sensation of food sticking in the chest beginning one year prior to admission. Endoscopic examination revealed normal esophageal mucosa. However, there was gastric mucosa extending above the diaphragm. An x-ray following the ingestion of barium revealed a portion of the stomach lying above the diaphragm with considerable constriction of the stomach at the esophageal hiatus. The symptoms of obstruction and other discomfort of this patient were due to constriction of the stomach as it passed through the diaphragm. It is in this type of case that paraylses of the diaphragm by a phrenic nerve operation will give satisfactory results in a high percentage of patients.

Case #2. S. C. #414436. This 66 year old white female complained of epigastric pain of 3 weeks duration. She had been in excellent health until three weeks prior to admission when she developed pain in the epigastrium. It occurred characteristically one to two hours after meals gradually increasing in severity for the next hour or two. On three occasions she had been awakened at night with the distress. There was no history of nausea, vomiting or hemoptysis. X-rays following the ingestion of barium revealed a short esophagus with considerable portion of the stomach above the diaphragm. Because of the absence of obstructive symptoms and the advanced age of the patient and poor general condition, relaxation of the diaphragm was thought to be the treatment of choice and thus a phrenic nerve operation was performed. The patient was completely relieved following operation and in the 7 years subsequent followup symptoms have not reoccurred. Although the indication for a phrenic nerve type of operative procedure for this condition will be relatively infrequent, as indicated by the above two cases, it is a simple satisfactory type of management in some patients.

Case #3. S. T. This 59 year old white female was admitted with a history of increasing difficulty in swallowing of two months duration. The dysphasia was painless in character and became increasingly worse until on admission she was only able to swallow liquid material. She had lost approximately 40 lbs. in weight since the onset of difficulty. On endoscopic examination a narrowing of the lumen of the esophagus was found at a distance of 31 cm from the incisors. The wall of the mucosa appeared granular but a biopsy showed no evidence of tumor. X-rays following the ingestion of barium revealed a markedly dilated esophagus above and extension of the stomach into the thorax below. At the junction of the two organs a marked constriction was seen.

A transthoracoabdominal partial resection of the esophagus and stomach was carried out, with reestablishment of the esophagogastric channel. Although the immediate postoperative course of the patient appeared to be satisfactory she suddenly expired in the middle of the night. At postmortem examination a wide dissimation of metastatic carcinoma with the primary located in the cervix of the uterus was found. The cause of death appeared to be

a combination of carcinomatosis and retaining of secretions in the treacha bronchial tree.

Case \$4. H. R. \$392638. This 17 year old mexican boy gave a history of regurgitation of food ever since birth. However, he was able to take a full diet until the age of 3. During the subsequent two years he developed normally but was maintained on a liquid diet. By the age of five he began to regurgitate all food and a gastrostomy was made. During the twelve subsequent years he had been fed entirely through a gastrostomy tube, and developed normally and had been maintained in a good nutritional state. An x-ray of the chest taken following the swallowing of barium and the introduction of barium into the stomach



Figure VI. a., b. a. X-ray appearance of the chest after ingestion of barium above and injection of barium through a gastrostomy tube below. Note complete obstruction over an area of 2 or 3 cm. between the two injected areas. This injection was in a 17 year old Mexican boy who had developed complete obstruction of the esophagus at the age of five years. Since that time he had received all nourishment through a gastrostomy tube. A portion of the stomach below extends above the diaphragm. Diagnosis: congenital short esophagus with thoracic stomach and complete obstruction at the cardioesophageal junction.

through the gastrostomy tube revealed complete obstruction of the passageway between the esophagus above and the portion of the stomach extending above the diaphragm below (see Figure VIa). Through a thoracoabdominal approach the stomach was mobilized, the gastrostomy opening closed and a side to side anastomosis was made between the fundus of the stomach and the esophagus above the site of stricture. Following operation alimentation through the normal channel was begun with complete relief of obstructive symptoms as seen on x-ray following the ingestion of barium subsequent to operation (see Figure VIb). This patient has been followed eight years since his operation and has shown no evidence of peptic esophagitis or ulceration or return of obstructive symptoms during that period. In view of our subsequent knowledge of altered physiology attending

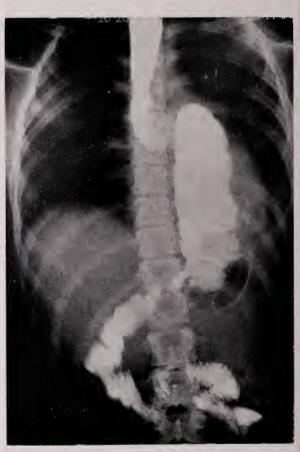


Figure VIb. X-ray appearance following the ingestion of barium several weeks following an operation for the relief of esophageal obstruction. This entailed the elevation of the stomach above the diaphragm and a side to side anastomosis above the site of obstruction and a total vagotomy. The patient was completely relieved of obstruction and has been symptom free since operation six years ago.

short esophagus and stricture it is likely that the acidity in this patient was insufficient to produce these clinical manifestations. At the present time it is thought best to combine the above operation with vagotomy and gastroenterostomy as a safeguard against the recurrence of symptoms following operation.

Case #5. L. A. #597768. This 54 year old white male was admitted complaining of difficulty in swallowing of six months duration. During this period his dysphagia was progressive and he lost 30 lbs. in weight. No pain. bleeding or other symptoms had been noticed. An x-ray of the lower chest following the ingestion of barium revealed a portion of the stomach extending above the diaphragm. In the upper field was a very slightly dilated esophagus with a markedly narrowed area between the esophagus and stomach. X-rays were interpreted as showing a one cm. ulcer crater within this constricted area. On endoscopic examination normal esophageal mucosa changed to a granular appearance with narrowing of the lumen, approximately 42 cm from the upper incissors. The mucosa at this level was irregular, friable and bled easily on contact. Through a thoracolaparotomy approach the upper stomach and lower esophagus was explored. A portion of the stomach was lying above the diaphragm and a carcinoma was found at its junction with the esophagus. Resection of the lower esophagus and upper stomach was carried out with esophago-gastrostomy following resection. (Since a number of nodes in the mediastinum containing tumor were found it was presumed that the operation was palative in nature. The remainder of the operation included a vagotomy and a pyloraplasty.)

This patient is an example of ever increasing reports of malignant tumors arising at the junction of the esophagus with the cardia in patients with short esophagus. This thus indicates the importance of endoscopic examination and exploration by thoracotomy in most of these patients. It is only in this way that a delay in correct diagnosis may be avoided when other means of management are used over a long period of time.

III. BENIGN STRICTURE FOLLOWING PEPTIC ESOPHAGITIS

Case #1. P. V. This 26 year old white male was admitted on September 6, 1941 complaining of difficulty in swallowing which had be-

gun approximately 3 years previously. Liquids as well as solid foods seemed to stick beneath the sternum. Relief was obtained only after most of the food had been regurgitated. During the three year period he had lost 45 lbs. in weight. Two years before admission a diagnosis of a stricture of the lower esophagus was made and repeated dilitations were performed which would give him relief for one or two days. Antispasmotics afforded him very little relief. No etiologic factor could be ascertained.

On physical examination it was obvious that considerable weight had been lost. Roentological studies of the esophagus following the ingestion of barium revealed a stricture of the lower esophagus which began about 2 cm above the diaphragm. Endoscopic examination revealed the presence of stricture but normal mucosa was found throughout.

The patient was very despondent and refused dilitations or any form of conservative therapy. Through a transthoracoabdominal approach exploration of the region of stricture revealed no evidence of tumor. After mobilization of the lower end of the esophagus and elevation of a portion of the fundus of the stomach into the thorax an anastomosis between the latter and the esophagus above the stricture was carried out. A vagotomy was then performed. An x-ray of the chest following the ingestion of barium thirteen days following operation revealed a well functioning esophago-gastrostomy. after he was able to eat any food without experiencing any difficulty and within a few months had regained all of his lost weight. As was noted above this patient was managed many years ago. At the present time either a pyloroplasty or gastroenterostomy would have been added to the above described procedure in order to avoid the side effects of vagotomy.

IV. BENIGN TUMORS OF THE ESOPHAGUS

Case \$1. A. F. This 50 year old white female was admitted complaining of epigastric and substernal distress of two months duration. During this time also she experienced a full feeling beneath the sternum and in the epigastrium after eating. Her discomfort usually began one-half hour to one hour after eating and was accompanied by belching. She had lost approximately 8-10 lbs. in the few

weeks prior to admission.

General examination and laboratory findings were essentially normal. An x-ray of the chest following the ingestion of barium revealed a considerable portion of the stomach extending above the diaphragm. In this same region a rounded opaque mass produced considerable dislocation of the esophagus. On endoscopic examination the esophageal mucosa appeared normal to a distance of 37 cm. At this point there was a gray colored membrane which on removal revealed a granular red mucosa. Below this point was normal appearing gastric mucosa. Clinical impression: 1. short esophagus with thoracic stomach, 2. Mild peptic esophagitis, and 3. leiomyoma of the esophagus.

Through a thoracoabdominal approach a tumor of the lower esophagus was found and removed. The tumor involved the mucosa sufficiently to require resection of the lower esophagus which was followed by an end to side anastomosis with the stomach, a vagotomy and gastroenterostomy.

This patient continued to have persistent symptoms varying in degree suggesting the presence of peptic esophagitis with some ulceration. However, on medical management she improved untl approximately two years later at which time she was readmitted to the hospital for study. It was found that she had an incomplete vagotomy, a 12 hour night secretion showing a 15 milli-equivalents of acid. After again being placed on an antiulcer regime her symptoms disappeared and she had continued to get along well to the present time. (5-13-54).

Case \$2. A. M. A 46 year old Polish laborer complained of epigastric distress of 6 weeks duration. On further questioning however it was found that he had noticed occasional pain in the lower part of the chest on the right side for the previous eighteen months. Several of the acute episodes of pain were accompanied by nausea and vomiting. He had experienced some anoxreia and had lost fourteen pounds in weight. At no time had dysphasia been present.

Physical examination and laboratory findings were within normal limits. X-rays following the ingestion of barium revealed the lower part of the thoracic esophagus to be displaced to the right. Approximately the upper fifth of the stomach lay above the level

of the diaphragm. A rounded opacity was present in the lower mediastinum posteriorly. The clinical impression was a short esophagus with thoracic stomach and a benign tumor of lower esophagus. Through a lower thoracic approach exploration of the inferior mediastinum revealed a short esophagus with thoracic stomach and a tumor of the musculature of the lower esophagus. This tumor did not completely surround the esophagus and could be removed without sacrificing the entire circumference of the organ. After repairing the defect in the esophageal wall the stomach was replaced in the abdomen to a considerable extent and the appature closed about the lower end of the esophagus. During the five months follow up period the patient has had no complaints or evidence of former symptoms since discharge from the hospital.

Final diagnosis: short esophagus with thoracic stomach and leiomyoma of the lower esophagus.

Of 23 patients with short esophagus and thoracic stomach four also had a tumor at the junction of the stomach and esophagus. In two of these patients the tumor was malignant and in two others it was benign. Likewise, in achalasia of the esophagus differential diagnosis from a malignant tumor at the lower end of the esophagus is sometimes difficult or impossible. In our experience one such case had been followed by repeated dilitation for over a year before coming to operation. Thus, in the differential diagnosis and management of benign lesions of the lower esophagus all possible means of identification of the lesion should be used. When clinical impression strongly suggests the presence of tumor these methods of diagnosis should be used and repeated within a short period of time if at first are negative. It is only in this way that surgical extirpation of malignant tumors of the esophagus will show fruitful results in terms of a long time survival.

REFERENCES

- Barrett, N. R.: Chronic Ulcer of the Esophagus and Esophagitis. British J. Surgery, 38: 175, 1950.
- 2. Wangensteen, O., and Leven, N. L.: Resection for Esophagitis and Stricture of Acid-Peptic Origin. Surg., Gynec. and Obs., 88:560, 1949.
- 3. Sweet, Richard H., Robbins, Laurence L., Gephart, Thomas, and Wilkins, Earle W. (Jr.), The Surgical Treatment of Peptic Ulceration and Stricture of the Lower Esophagus. Ann. Surg., 139:257. 1954.



SYSTEMIC LUPUS ERYTHEMATOSUS*
Louis A. Brunsting, M.D.
Section of Dermatology and Syphilology,
Mayo Clinic and Mayo Foundation,†
Rochester, Minnesota

The historical background and the modern concept of the pathologic anatomy of lupus erythematosus have been well summarized by Klemperer in a recent publication. More has been added to our knowledge of this disease in the present generation than in the past century. Klemperer ascribes this long drought to two factors: an overemphasis on morphologic classification and an inordinate preoccupation with etiology, particularly with the false lead of tuberculosis. Pathologic data furnish exact knowledge about disease, it is true, but in dealing with the patient the practicing physician must be concerned chiefly with helps in diagnosis and treatment.

The two most recent and significant developments in respect to systemic lupus erythematosus have been the discovery of the L. E. cell phenomenon and the response of the disease to the corticosteroids. I shall emphasize these two points in my discussion.

Symptomatology and Course

Few conditions match the diversity of the clinical picture of lupus erythematosus. In the chronic discoid form, whether the lesions are localized to the familiar butterfly pattern over the cheeks or are widely disseminated to resemble psoriasis, there is still little more than cutaneous involvement. (In this stage, the symptoms respond well to quinacrine (atabrine) hydrochloride or chloroquine phosphate.⁸) At the other extreme, in the acute

* Read at the meeting of the Sioux Valley Medical Society, Sioux City, Iowa, February 25, 1954.
† The Mayo Foundation is a part of the Graduate School of the University of Minnesota.

septic phase of the disease, abrupt and fulminating, the course proceeds rapidly to fatal termination within a few weeks, with systemic repercussions involving all tissues of the body. In between, stages of varying severity are observed, with and without cutaneous manifestations, the disease process being a smoldering one that extends over a period of 10 years or more, with irregular relapses and remissions. In this subacute or protracted phase of the disease, the diagnostic acumen and discretion of the clinician are challenged to the utmost. Here, the judicious application of newer laboratory aids has brought many hitherto unrecognized cases of lupus erythematosus into the open.

The classic symptoms of systemic lupus erythematosus are well known. 12 The disease has a predilection for women in young adult life, those with red hair or a freckled complexion being especially vulnerable. Sensitivity to the sun is quite common and may precipitate an acute attack. The skin frequently shows an erythematous blush over the face and the V of the neck; purpuric lesions and bouts of urticaria may occur. Often the skin signs are atypical or absent altogether. The degree of fever varies with the stage of the disease but symptoms of profound fatigue, coupled with arthralgia, are almost invariably present.

There may be pains in the thorax with a friction rub, and pleurisy with effusion. Pains may be referred to the abdomen; exploratory laparotomy in such cases has often been carried out.

In view of the varied symptoms, the diagnosis is difficult and the examining physician seems to consider lupus erythematosus only as a last resort.

To show the puzzling aspects of the clinical and laboratory findings, I shall list the conditions that have been considered in differential diagnosis in my own experience of the past few years in dealing with patients who were ultimately proved to have systemic lupus erythematosus. These conditions are: rheumatoid arthritis, rheumatic fever, subacute bacterial endocarditis, infectious mononucleosis, dermatomyositis, polyarteritis nodosa, tuberculosis, pleurisy with effusion, thrombocytopenic purpura, acute leukemia, nephrosis, convulsive disorder. thrombosis and syphilis (false positive serologic reaction).

Certain laboratory aids are most helpful in correct diagnosis. Biopsy of skin lesions shows the same histologic picture in the systemic as in the chronic discoid forms of the disease, the reactions differing in degree according to the stage of the illness. Leukopenia and thrombocytopenia are commonly present. The sedimentation rate of the erythrocytes is uniformly elevated, ranging from 50 to 100 mm. in 1 hour (Westergren method), and even higher in the more acute phases. The albumin-globulin ratio of the serum proteins is not changed except in the later phases of the disease. Varying degrees of renal damage may be shown by urinalysis although the concentration of blood urea may remain normal in the face of severe albuminuria until the disease is well advanced. When the L. E. phenomenon is clearly demonstrable in the bone marrow or the peripheral blood, the diagnosis is certain. The L. E. phenomenon is found in the acute stages without exception, but in the early phase of the subacute stage, the reaction may be negative or equivocal and the diagnosis must be made from the combination of clinical and laboratory findings.

The L. E. Cell Phenomenon

In 1948, Hargraves and co-workers demonstrated the presence of L. E. cells as an in vitro phenomenon in specimens of bone marrow obtained from patients with systemic lupus erythematosus. Subsequently these were demonstrated in specimens of peripheral blood as well. The technic was further elaborated by Haserick and his group^{6, 7} who

found that the factor responsible for the reaction was associated with the gamma globulin fraction of the plasma. Since that time, variations in the technic of the test have been described. Recently, Zimmer and Hargraves demonstrated a relationship between the clotting mechanism and the formation of L. E. cells in vitro. The L. E. phenomenon, according to Hargraves,2 depends on the presence of three substances: (1) the lytic or L. E. factor (gamma globulin), (2) a source of nuclear protein to react with the lytic factor (usually polymorphonuclear leukocytes) and (3) viable phagocytic leukocytes to engulf the lysed material, producing the L. E. cells (usually neutrophilic polymorphonuclear leukocytes).

When L. E. cells are demonstrable and lysed nuclear material is present in the specimen, the test is essentially pathognomonic of systemic lupus erythematosus. (So-called "tart" cells may be present but they are not L. E. cells.) Borderline reactions are obtained in cases of the subacute phase of the disease, and a few questionable reactions have been reported in patients who showed features of rheumatoid arthritis, polyarteritis nodosa and dermatomyositis. The presence of the L. E. phenomenon, then, is confirmatory of the diagnosis of systemic lupus erythematosus but its absence does not rule out such a possibility. There are variations in the intensity of the phenomenon from time to time.

The technic in current use at the Mayo Clinic for demonstrating L. E. cells is as follows: 10

- 1. Draw 10 ml. of blood in a tube 15 mm. by 125 mm. and allow it to clot for 2 hours.
- 2. Rim the clot if necessary, pour off and discard the serum.
- 3. Place a sieve (made of wire gauze, 40 meshes to the inch) over a Petri dish and turn the clot onto the sieve. Mash the clot through the sieve with a pestle.
- 4. Fill a Wintrobe sedimentation tube with the expressed material and centrifuge at 2,000 r.p.m. for 5 minutes.
- 5. Make smears from the buffy coat after withdrawing the serum down to the layer of leukocytes.
 - 6. Stain with Wright's stain and examine.

Treatment

A good deal has been written about the use of cortisone and corticotropin (ACTH) in the treatment of lupus erythematosus, 1, 4

but certainly not all patients in this category are candidates for this treatment, nor is the presence of the L. E. cell an indication for such treatment. No fixed rules can be laid down for treatment in general, for the needs of the individual patient must be kept in mind. Reports that have been made of successes with one form of treatment or another often lose sight of the fact that the patient in the subacute phase of the disease may run an extended course characterized by spontaneous relapses and remissions. In older patients, the natural course is milder than in young adults. In general, supportive treatment is indicated. of which rest in bed is the main feature. Blood transfusions are helpful adjuncts and antibiotic agents will control intercurrent infections if they are recognized early enough.

It must be remembered that patients with lupus erythematosus are extremely hypersensitive; they react adversly in exaggerated fashion to common drugs and ordinary stimuli. Vitamin B, given intramuscularly in doses of 15 mg. twice a week for a period of 10 to 12 weeks brings about improvement in wellbeing. The use of bismuth and gold salts has been superseded by safer measures. I have had no satisfactory experience with the use of large doses of vitamin E, pantothenic acid or the salts of para-aminobenzoic acid.

In the acute septic phase of the disease, cortisone or corticotropin or both must be administered promptly and in effective doses to control the fulminating symptoms. I prefer the use of cortisone for it can be given by mouth. Doses of 400 to 800 mg. of this hormone per day, in divided doses, may be needed in the initial stages and the amount reduced according to the response of the patient. Every care must be taken to anticipate the complications attending such heroic therapy, that is, retention of salt and water, development of nervous or mental symptoms, gastrointestinal complications and masked intercurrent infections. A low intake of sodium is prescribed as well as the addition of potassium salts by mouth.

In the subacute phase of the disease, cortisone or corticotropin is used according to the clinical indications, particularly with regard to the presence of fever and arthralgia. In the milder cases, the use of these hormones brings about an increased sense of well-being so that the patient is inclined to chafe at

the restrictions imposed by a regimen which requires an abundance of rest. In the presence of albuminuria, these hormones must be used with caution. Albuminuria is a serious prognostic sign and there is some evidence to indicate that these hormones will aggravate previously damaged kidneys. In the subacute stage of the disease, the dosage of cortisone is 100 to 200 mg. a day at first; this dose is reduced when the fever responds, and I like to keep it just below the level of control of clinical symptoms so as to avoid the complications of excessive dosage. Some patients who have been under observation for 4 years have received cortisone or corticotropin or both periodically and have remained reasonably well on the basis of surface manifestations. The degree of intensity of the L. E. phenomenon may recede under treatment and some have reported the total abolishment of the phenomenon. This is a variable factor and cannot be used in prognosis.

I am not convinced that the addition of corticotropin periodically to the program of those who are on long-term maintenance therapy with cortisone is justifiable. Theoretically, in such cases, injections of corticotropin stimulate the depressed adrenal to produce added corticosteroids but, in the long run, both cortisone and corticotropin bring about functional atrophy of the pituitary so that it no longer responds to stimulation.

I am not convinced that it is necessary to bring about a state of saturation with these hormones to the extent of the development of a Cushing-like syndrome in order to achieve absolute therapeutic results. After all, these hormones are not curatives; they are valuable aids which have given us, for the first time in the history of the disease, a tool for the control of the fulminating symptoms. They must be used with caution and applied particularly to the changing needs of the individual patient.

REFERENCES

Brunsting, L. A., Slocumb, C. H. and Didcoct, J. W. 1951 Effects of Cortisone on Disseminated Lupus Erythematosus. Arch. Dermat. & Syph., 63, 29-48.
 Hargraves, M. M. 1952 The L. E. Cell Phenomenon. Proc. Staff Meet., Mayo Clin., 27, 410, 422.

419-423.

3. Hargraves, M. M., Richmond, Helen and Morton, Robert. 1948 Presentation of Two Bone Marrow Elements: The "Tart" Cell and the "L. E." Cell. Proc. Staff Meet., Mayo Clin., 23, 25-28.

(Continued on Page 317)



CARCINOMA OF THE VULVA, CERVIX, AND ENDOMETRIUM* David I. Seibel, M.D. University of Minnesota Medical School

Minneapolis, Minnesota

Introduction

This is a discussion of three important gynecologic malignant diseases: carcinoma of the vulva, cervix and endometrium. Diagnosis will be mentioned briefly, but the major portion will concern itself with treatment. The reasoning behind the management of each neoplasm is of foremost importance. This reasoning is based on the biology of the disease, clinical experimentation in therapy, and above all, that final authority, the fiveyear survival rate.

Carcinoma of the Vulva

Biology of the disease

Carcinoma of the vulva is a malignancy of the skin of the vulva or mucus membrane of the vestibule occurring usually in elderly women. Most often, it is a squamous cell carcinoma. As the population ages, we shall see this cancer more frequently.

The etiology is unknown. A high percentage of cases is associated with the leukoplakia-kraurosis complex. It was once said that if all patients with leukoplakia lived long enough, they would all develop carcinoma.

Carcinoma of the vulva is a generalized disease. Clinically one may observe only one tumor mass, but microscopic studies have shown multiple intraepithelial foci of origin. In other words, when a cancer of the vulva is present, the entire vulval area is potentially malignant.

* Presented at regular monthly meeting of Aberdeen District Medical Society, April 7, 1954.

Fortunately carcinoma of the vulva grows slowly; furthermore, it remains in the regional nodes for a long time. These nodes are the inguinal-femoral groups bilaterally. From the latter nodes, the tumor extends in time to a sentinel node inside the femoral ring, Cloquet's node, and thence to obturator and iliac nodes.

A practical way of classifying this cancer is as follows:

Stage I Lesion less than 10² cm.

Stage II Lesion more than 102 cm.

Stage III Lesion involving urethra, vagina or anus

Stage IV Distant metastases

Diagnosis

Diagnosis is simple. The patient complains of itching or irritation, or of a sore which does not heal. The physician observes a heaped-up or ulcerated lesion often in an area of leukoplakia. A small amount of procaine is injected beneath the lesion, and a knife biopsy taken.

If these often shy old ladies would go to their doctors when symptoms first appear, and if doctors would take biopsies instead of prescribing douches or ointments, the cure rate for the disease would approach 100%.

Inguinal or femoral nodes should not be biopsied. It makes no difference whether a node is enlarged because of inflammatory hyperplasia or metastatic carcinoma, it is going to be removed en bloc at surgery. Nodal biopsies may spread tumor, and spoil dissection planes.

Treatment

In the treatment of carcinoma of the vulva, there are the following problems: 1) It is a generalized disease of the vulva. 2) The regional lymph nodes are bilateral. 3) The patients are usually of advanced age.

Why not use irradiation therapy? Assuming it requires 7 erythema skin doses (ESD) to eradicate the lesion, it would be impossible to deliver such a dose of x-ray to such a large, irregular area as the vulva and groins. Furthermore, the moist perineal skin is severely and painfully damaged by even 2 ESD. Radium or radon could be employed for a small lesion, but then the remainder of the vulva and regional nodes would be left untreated. Most important of all, irradiation therapy has been tried with resultant cure rates which are not acceptable.

Radical vulvectomy is the treatment of choice. This means a wide excision of the vulva, plus a bilateral groin dissection with removal of inguinal, femoral, upper saphenous, and Cloquet's nodes. Even in patients with degenerative cardiovascular disease, there is complete applicability of the procedure, because of the use of local anesthesia. Results

The five-year survival rate at the University of Minnesota is 50% with an 8% operative mortality rate.

Carcinoma of the Cervix

Biology of the disease

The majority of malignancies of the cervix are squamous cell carcinomas. There is no need to consider adenocarcinoma of the cervix or carcinoma of the cervical stump separately, as these behave in an entirely similar manner.

Carcinoma of the cervix usually has its site of origin at the squamo-columnar junction. It spreads by contiguous growth to the portio, vagina, parametria, and by lymphatic metastases to the pelvic nodes. It tends to remain localized in the pelvis for a long period of time. Many patients die of uremia due to ureteral blockage, or hemorrhage, or intestinal obstruction without demonstrable extrapelvic spread.

Etiology is unknown. Carcinoma of the cervix has a remarkably low incidence in Jewish women and nuns. It does not arise, as is commonly believed, in inflammatory lesions of the cervix, such as erosion or erosion-

healing.

Carcinoma of the cervix, by tradition, is classified according to rules set down by the League of Nations, and justifiably so, because the prognosis is directly related to the extent of the tumor when first seen and not its histologic grading.

Diagnosis

There should be no difficulty here. The patient complains of an unusual discharge or bleeding. The physician notes a lesion of the cervix, and immediately takes a biopsy by means of a punch or knife. This is a painless office procedure. If there is no obvious lesion, a curettage should be carried out, as the tumor may be hidden within the endocervical canal.

Treatment

It is generally agreed that irradiation therapy of cervical cancer offers the most effective therapeutic approach presently available, and until something better comes along, we must use irradiation with maximum efficiency.

What are we trying to accomplish with irradiation therapy? It requires about 7,000 tissue roentgens to cure a squamous cell carcinoma. Theoretically, then, we want to deliver 7,000 tissue roentgens diffusely to the pelvis in order to destroy tumor in the cervix, parametria, upper vagnia, and nodes along the pelvic wall.

X-ray irradiation is given first. Over a period of 28 days, 3,000 tissue roentgens is delivered to the pelvis via five portals. During therapy the patient is hospitalized.

- 1) Why start with x-rays rather than radium? With the relatively small daily dose of x-ray, there is an opportunity to observe the patient's reaction to radiation. A patient with unsuspected pelvic inflammatory disease or pelvic tuberculosis might be destroyed by the initial application to the pelvis of radium with its relatively enormous short-focal-distance destructive effect. During the period of x-ray therapy, an exophytic necrotic tumor mass shrinks, and concomitantly, the infection within the tumor and parametria clears, making radium therapy safer. With the exophytic portion of the tumor gone, a more anatomically ideal application of radium is permitted.
 - 2) Why use five portals of x-ray? By

crossfiring the beams, the x-irradiation can be given diffusely to the pelvis, and no one skin portal need be excessively burned.

- 3) Why administer only 3,000 tissue roentgens? Over the years clinical experimentation has shown this to be the optimal biologic dosage. Below this level, the cure rates drop. Above this level, there is too high a price to be paid in terms of radiation morbidity and mortality.
- 4) Why hospitalize the patient? There is strong evidence that the healing of a tumor is in final analysis a factor of normal tissue response. Radiation therapy does not have as its aim the sloughing away of a tumor, but rather the interference with its reproduction, still leaving the normal surrounding tissue in a state in which it can react. This requires not only optimal dosages of irradiation energy, but also optimal physical condition of the host. Only in the hospital can one insure adequate food and fluid intake, treat infection quickly, and combat anemia by blood transfusion.

As soon as x-ray therapy is completed, radium is inserted to supply the necessary additional irradiation dosage. Therapy, then, is continuous, in order to minimize the factor of tumor recovery. The radium dosage is given over an arbitrarily standardized 100 hours. Multiple radium portals are used in order to get a maximum dose at as great a distance in the lymphatic drainage system as possible while still remaining within the tolerance of the local tissue which must be left so that it will heal. Compound isodose curves for an ideal setup show the cervical tumor itself to receive about 20,000 gamma roentgens. This is more than the theoretically required 7,000 roentgens, but is not the determining factor in dosage. The cervix and vagina in the well nourished patient will tolerate this and heal. A Kaplan colpostat is used in the vagina with as many portals to a maximum of three as the individual vagina will take. Radium in tandem is placed in the uterine cavity. Where anatomically possible, two portals in tandem of 10 mg. of radium each are used in the uterus and three similar portals in the 2 arms and central cork of the Kaplan colpostat in the vagina. Thus 50 mg. are applied for 100 hours. In spite of the 20,-000 gamma roentgens which the cervix receives, only 1,000 gamma roentgens reach the pelvic wall, due to the inverse square law. Then why not increase the radium dosage? Increasing the radium dosage would prohibitively increase the incidence of radiation ulcers, vesicovaginal, and rectovaginal fistulae.

It is important to note that the total dosage of irradiation to the pelvic wall from x-rays and gamma rays is far below the necessary 7,000 roentgens. Yet the cure rate for Stage III tumors at the University of Minnesota is 30%. Again, this is probably related to interference with tumor cell division, plus stimulation of the host's connective tissues to react to throttle further tumor growth.

Results

The five-year survival rate at the University of Minnesota is 53.6% for all stages combined.

Carcinoma of the Uterine Corpus Biology of the disease

Carcinoma of the corpus is synonymous with adenocarcinoma of the endometrium.

Etiologically there are some interesting leads. Some clinics have reported that adenocarcinoma of the endometrium is frequently associated with granulosa-cell and theca-cell tumors of the ovaries. This combination of tumors has not occurred in the University of Minnesota series. There is commonly a history of prolonged and irregular bleeding during the climacteric in patients who later develop adenocarcinoma of the endometrium. Some authors consider menopausal hyperplasia a precancerous lesion. At our institution, hundreds of patients with menopausal hyperplasia have been treated by curettage alone or in combination with x-ray sterilization, and none, to our knowledge, have subsequently developed adenocarcinoma. What has impressed us, as well as authors of other series is the fact that a female who is obese, hypertensive and diabetic and who has postmenopausal bleeding almost invariably has adenocarcinoma of the endometrium.

Adenocarcinoma of the endometrium spreads along the surface of the endometrium and invades the muscularis. Later it involves the endocervix, tubes, and ovaries. Still later it will invade the parametria or metastasize to aortic nodes.

One of the peculiarities of this tumor is the not infrequent occurrence of vaginal metastases after hysterectomy. It is for this reason

that these patients should be followed at frequent intervals for the first five years after therapy. These vaginal lesions can be satisfactorily handled by means of surface irradiation with radium or radon implants.

Diagnosis

Any abnormal uterine bleeding, especially after the menopause, is an indication for diagnostic curettage.

It is important when performing the curettage to curette the endocervix first and then the fundus. Material from cervix and fundus are sent as separate specimens to the pathology laboratory. Adenocarcinoma of the cervix, as mentioned above, is handled entirely differently from adenocarcinoma of the endometrium.

Treatment and results

In 1939, a clinical experiment was begun at the University of Minnesota to determine the place of x-ray, radium and surgery in adenocarcinoma of the endometrium.

The following table summarizes this experiment:

Years	Treatment			
1939-1940	X-ray, radium and surgery			
1941-1946	Radium and surgery			
1947-1949	Surgery only			

Surgical Rate	Five-year		
	survival rate		
66%	58%		
67%	58%		
86.5%	68%		

Note that dropping x-ray therapy without changing the percentage of patients who underwent panhysterectomy did not adversely affect the cure rate. Also note that increasing the surgical rate increased the cure rate. The evidence suggests that the most effective therapeutic measure is the removal of the uterus. There are good theoretical bases for this concept.

Adenocarcinoma of the endometrium is a relatively radioresistant tumor, requiring about 10,000 tissue roentgens for its destruction. The 3,000 tissue roentgens that can be delivered by x-ray irradiation over 28 days is grossly inadequate. Even the most ideal application of radium to the uterus produces an effective destructive dose at the surface of the uterine cavity only. Due to the inverse square law, the dose delivered at depth to the musculature becomes inadequate.

Radium, however, still has a useful place in "secondarily operable" patients. with extreme obesity or a recent myocardial infarction cannot be primarily operated. Time is needed to allow weight reduction or healing of the cardiac lesion. Radium is used to hold the tumor in check until the patient becomes a reasonable operative risk.

REFERENCES

McKelvey, J. L., Stenstrom, K. W. and Gillam, J. S. Results of an Experimental Therapy of Carcinoma of the Cervix. American Journal of Obstetrics and Gynecology. Vol. 58, No. 5, pages

896-907, November, 1949.
 McKelvey, J. L. The Treatment of Carcinoma of the Vulva. American Journal of Obstetrics and Gynecology. Vol. 54, No. 4, Pages 626-633,

October, 1947.

3. McKelvey, J. L., Holly, R. G., and Prem, K. A. Adenocarcinoma of the Endometrium. American Journal of Obstetrics and Gynecology. Vol. 64A, Pages 295-308, December, 1952.

SYSTEMIC LUPUS-

(Continued from Page 313)

4. Haserick, J. R. 1953 Effect of Cortisone and Corticotropin on Prognosis of Systemic Lupus Erythematosus: Survey of Eighty-three Patients With Positive Plasma L. E.

three Patients With Positive Plasma L. E.
Tests. Arch. Dermat. & Syph., 68, 714-722.

5. Haserick, J. R.: Systemic Lupus Erythematosus, in Current Therapy. Philadelphia, W. B. Saunders Company, 1954, pp. 619-620.

6. Haserick, J. R. and Bortz, D. W. 1949 A New Diagnostic Test for Acute Disseminated Lupus Erythematosus. Cleveland Clin. Quart., 16, 158-161.

7. Haserick, J. R., Lewis, Lena A. and Bortz, D. W. 1950 Blood Factor in Acute Disseminated Lupus Erythematosus. 1. Determination of Gamma Globulin as Specific Plasma Fraction. Am. J. M. Sc., 219, 660-663.

8. Kierland, R. R., Brunsting, L. A. and O'Leary, P. A. 1953 Quinacrine Hydrochloride (Atabrine) in the Treatment of Lupus Erythematosus. Arch. Dermat. & Syph., 68, 651-660.

brine) in the Treatment of Lupus Erythematosus. Arch. Dermat. & Syph., 68, 651-660.

9. Klemperer, Paul: Pathology of Systemic Lupus Erythematosus. In McManus, J. F. A.: Progress in Fundamental Medicine. Philadelphia, Lea & Febiger, 1952, pp. 51-68.

10. Magath, T. B. and Winkle, Virginia. 1952
Technic for Demonstrating "L. E." (Lupus Erythematosus) Cells in Blood. Am. J. Clin. Path. 22, 586-587

Path., **22**, 586-587.

11. Michelson, H. E. 1953 Review and Appraisal of the Present Knowledge concerning Erythematosus. Proc. Inst. Med. Chicago, 19.

12. O'Leary, P. A. 1954 Lupus Erythematosus. GP, 9, 57-64.

13. Zimmer, F. E. and Hargraves, M. M. 1952

The Effect of Blood Coagulation on L. E. Cell Formation. Proc. Staff Meet. Mayo Clin., 27, 424-430.



ARE MALPRACTICE CLAIMS PREVENTION PROGRAMS WORTH WHILE?*

By Howard Hassard, Esq. of Peart, Baraty & Hassard San Francisco, California

Suppose we analyze the title of this address point by point, in an effort to discern the underlying factors that cause the question to be posed.

1. First, "WHAT IS TO BE PREVENTED?"

To answer this, a brief historical review is appropriate. Regan tells us that in the decades between 1900 and 1940 there was a 540% increase in the number of malpractice cases that reached the appellate courts in the United States as a whole. In the year 1940 the total number of such cases was 33. In 1953 there were 32.

These years were picked at random. They indicate a plateau, which practical experience confirms. The volume remains at least five times the 1900 incidence.

Dr. Regan's statistics demonstrate the tremendous rise in the incidence of malpractice suits in the past fifty years. Further, a little research in a law library discloses that the increase is perhaps more noticeable in the largest metropolitan centers, but that it is by no means confined to any one area. It can not be localized.

Lest physicians assume that they are being singled out by the public for special torture, it must also be understood that all forms of personal injury litigation have dramatically increased since World War I. Mass production of the automobile has wrought many changes, one of them being increased fre-

* Presented at the Medical Society's Executives Conference, San Francisco, June 21, 1954. quency of accidental injuries or death and increased resort to law for redress.

When people become suit conscious in general, they tend to think in terms of legal action for any and all real or fancied grievances. Fifty years ago a guest in a home would consider it ungentlemanly to sue his host, because after the third martini he wandered through a plate glass window. Now, suits of this type are not too uncommon.

With the public litigation conscious, there is an evitable tendency to commence legal action, not only when warranted, but also when there is just a bare chance of recovery; sometimes even when there is no legitimate cause for complaint.

Within the field of professional liability, the main activity that can be "prevented" is the fraudulent or false or vindictive or long-shot suit that is not predicated on just cause. The meritorius action not only cannot be prevented, but ought not be impeded. However, to separate the sheep from the goats and thereby reduce the incidence of nuisance claims would drastically curtail professional liability actions, and in of itself is a justifiable reason for a claims prevention program.

2. Second, "WHAT IS MALPRACTICE?"

"Malpractice is the commonly used term to describe the liability at law of physicians and surgeons for torts committed during the course of their practice. Properly stated, it is "professional tort liability." A "tort" is a violation of one's duty to use reasonable pre-

caution for the safety of others, resulting in an injury to another.

By law, we all are obligated at all times to be reasonably careful of the safety of others. This applies to each of us in this room. If one of you should suddenly jump up, knocking over your chair in the process, and if the chair injures the person sitting behind you, you may find yourself the defendant in a tort action for having failed to use ordinary care. Most of you, no doubt, carry insurance against this liability called "public liability coverage."

As applied to physicians, the law requires that each physician possess the average skill found amongst fellow-practitioners doing the same work in his own community, and that he at all times exercise ordinary prudence and thoughtfulness in the application of his skill to his patients. The failure to live up to these obligations is called "malpractice."

The ordinary personal injury suit against the average person involves his pocketbook only. Hence, if he is adequately insured he gives the fact of a suit against him a very superficial concern.

But to a physician, or any other professional man, a professional liability suit involves something else that is much deeper, much more important. His professional reputation, his very livelihood, his pride and his self-respect are all at stake. In his mind, it is an accusation akin to a charge of dishonorable conduct. It is humiliating.

Therefore, we must not look solely to the financial aspects of malpractice.

Each physician, in order to avoid the humiliation of a liability suit, must become thoroughly familiar with the various rules of law, that together, constitute the law of malpractice. He must intimately know the rules of the game.

Medical schools are not law schools. Hence the practicing physician must acquire his knowledge of the law that governs him after he is in practice, and he must either acquire this knowledge haphazardly or systematically. He will pick up his concepts either on a hit-or-miss basis from dubious sources, or he will acquire it in an orderly fashion from teachers that know at least as much as the student.

A systematic, well-organized professional educational program in the field of malpractice has the possibility of achieving a tremendous reduction in the incidence of malpractice claims and suits. By educating physicians to their legal responsibilities and to the required conduct in carrying out those responsibilities, approval of the law, the public and patients may be obtained and maintained.

Malpractice has another most important facet that must be understood in any discussion of a claims prevention program.

All physicians today are, or ought to be, insured against professional liability. This insurance, however, is far from the ordinary run-of-the-mill public liability coverage.

It is true that the legal theory underlying responsibility for running down a pedestrian or for burning a patient with ultra-violet lamp are one and the same; but beyond that, all resemblance ceases. From the moment of knowledge, the investigation, claims analysis, preparation for defense, and defense of an automobile personal injury case are standardized, not too difficult to master, and fit into the ordinary operations of any insurance claims department or law office.

Neither the investigation, claims analysis, preparation for defense, or defense of a malpractice claim are in any way comparable to that of other personal injuries. An investigator must know enough about the practice of medicine to be able to know what to investigate when a claim of malpractice has been made. The analysis of the results of the investigation require expert medical judgment. The defense of a malpractice case in court involves specialized training in this field. The rules of evidence and the substantive rules of law are different than in the ordinary personal injury case. The lawyer must understand the medical aspects thoroughly, so that he can communicate in ordinary English to the judge and jurors the issues and facts involved.

Recently, I appeared in Federal Court at Salt Lake City, and while awaiting the commencement of our trial, I sat in the court-room and observed the case that preceded us, which was a suit by the Navajo Nation against the United States for damages resulting from the destruction of Navajo horses by agents of the United States Indian Service. The witnesses were all Navajo Indians who could not speak English; and interpreting was necessary, each question was translated by the interpreter into Navajo; when the witness re-

plied the interpreter translated the answer. The net result was that the trial took twice as long as it would have if court, jury, counsel, and witnesses all spoke in a commonly understood tongue.

This is an extreme example, but a malpractice trial is similar. Medical terminology must first be understood by counsel, and then converted into language understood by judge and jurors.

It is obvious that insurance companies that have a few malpractice policies outstanding in a community cannot afford to set up separate specialized malpractice claims departments, or employ attorneys who specialize in malpractice defense. Premium volume is too small to warrant tailormade or custom handling. To justify expenditure of funds for special treatment of malpractice policies, there must be a substantial volume, which means all or most of the physicians over a large area.

Needless to say, an insurance carrier, unless it has a large volume, cannot afford the further expense of a specialized prophylaxis or prevention program. Fire insurance companies, with all of their business at risk, can afford to spend substantial sums of money in fire prevention programs. Workmens' compensation insurers, with hundreds of thousands of employees insured, can afford to spend money on safety programs. But an insurer with a few hundred scattered physicians insured simply can't do it.

One essential of insurance is spread of risk. The whole field of physicians' professional liability in the United States is limited to approximately 160,000 physicians. If one company insured all, the insurance base would be minor, as compared to twenty million automobile owners, or fifty or sixty million homes, or the sixty to seventy million people covered by workmens' compensation.

Hence, one of the inherent problems in malpractice insurance is the limited market, and the consequent limited ability, of any one carrier to conduct the equivalent of a safety program.

3. Third, "WHAT IS A PROGRAM?"

In northern California, twenty-three county medical societies now have professional liability insurance contracts with the same insurance carrier, American Mutual Liability Insurance Company. In all, close to four thousand physicians are participating. While each

county has its own group contract, the program is substantially the same from Fresno in the south to Siskiyou in the north.

Each county has a medical committee. In the early stages of each claim against a physician, the facts are fully investigated by claims representatives of the insurer, who devote their entire time to this type of work. As claims adjusters, they are "specialists" in professional liability work.

When the case is investigated, the facts are then submitted to the society's medical committee. The members of the committee discuss and debate the case, sometimes call for more investigation, sometimes ponder their decision at length, on other occasions reach a conclusion fairly rapidly.

In any event, the committee satisfies itself that it has considered all the material facts, and then recommends either

- 1. That the claim has merit and that the claimant should be fairly compensated; or
- 2. That the facts do not disclose any medical dereliction on the part of the accused physician, and that the case should be defended.

To date, in each instance the insurance carrier has abided by the recommendations of the appropriate committee.

The functioning of the society's committee does not, however, terminate with recommended action. If it has recommended that the case be defended, the members of the committee then actively and voluntarily assist in the preparation of the defense and in the actual trial of the case. To the defense attorney, this is of invaluable aid. Incidentally, it reduces the cost of defense substantially.

Finally, the members of the various medical committees also appear before various professional audiences, and from their experiences undertake to explain to the practicing physician the legal pit-falls that beset a doctor and the conduct which should be adhered to to avoid legal liability.

The physicians who serve on these committees obtain "occupational experience." They know from having experienced specific cases what the problems are, and what information a physician needs to conduct "good practice" rather than "bad practice."

Admittedly, the program in California is far from perfect. A great deal more could be done, and should be done, to inform all physicians of their legal obligations, and to enable them to avoid the humiliation of a malpractice suit.

More manpower than has been available to date is no doubt needed. But at least we believe that this program is a sensible beginning. We feel that malpractice claims are intelligently analyzed, and that time and money are not wasted in endeavoring to defend the indefensible. On the other hand, unwarranted claims are discouraged in that nuisance settlements are not made. If the case is unjust it is defended; it is not settled, no matter how cheap it can be bought.

Physician participation in the trial of cases is obtained on a voluntary cooperative basis, and above all the physicians who serve on the medical committees become experienced in and are aware of the problems involved, and are able to do missionary work amongst their colleagues.

The results of such a program require years to become really measurable. We feel that at least ten years, and probably fifteen years, must elapse — and we are now only in the fifth full year — before any reliable inventory can be made.

However, the results to date indicate to us who are close to the picture that we have at least halted that steady increase in the incidence of malpractice claims and suit noted by Dr. Regan, that commenced early in the century and that has continued without interruption for fifty years.

There are a few specific observations that are somewhat collateral to the title of this address, but that are most important and ought not to be ignored in considering the value of any prevention program.

- 1. The incidence of malpractice claims is in inverse ratio to the degree of personal relationship between physician and patient. The more impersonal and aloof a physician is, the more critical the patients are bound to be.
- 2. The confidence and respect of a patient in his physician is rudely jolted when another physician makes sarcastic or derogatory comments. The roots of many malpractice cases are embedded in such remarks as "What butcher performed that operation?" or "How in the world could he have missed it?" The physician, like all of us must sell himself. The art of salesmanship is not easily acquired and the amateur usually does the wrong thing.

He builds himself up by knocking others. Actually, that is poor salesmanship. The expert salesman ignores his competitor and concentrates on establishing confidence in himself.

- 3. Even the poor have pride, and a certain way to wound deep personal pride and self-respect is for a physician to send a bill that his patient can't pay and humble the patient to the point where he has to ask for charity. Many a malpractice case has its roots in the thoughtless handling by a physician of the financial side of his practice. The bill doesn't have to be exorbitant to cause anger and resentment; it can be reasonable, but if it humiliates, resentment is immediately aroused. A little tact and a little inquiry before billing could save many a headache.
- 4. Lawyers soon learn not to believe everything that their clients tell them. People have a habit of stating as fact that which they would like to believe, not the cold cruel reality. Many physicians find it difficult to realize that the tales their patients tell them may not necessarily be true. Consequently, a patient who is shopping will tell a physician a tall story about treatment that he received from another doctor; the physician accepts it as true, and comments accordingly; next year, he is in court.
- 5. Inherently, malpractice prevention is entwined with malpractice insurance. The insurance obtained must be adequate and the carrier interested. Insurance is a commodity, it comes in different prices and packages and is produced to fit a market. If one buys the cheapest policy, one gets exactly what is deserved — the lowest quality. For physicians to buy malpractice insurance solely on the basis of price, is, to my mind, foolish. Recently, a California physician cancelled his group coverage because he could save \$10.00 elsewhere. He said, "We feel that with today's competitive prices we have to be on the lookout for savings." So will his carrier when he is faced with a claim of malpractice. Then he will learn. A malpractice prevention program and basement bargain sales are incompatible with each other. A safety program costs money, whether it involves your home, factory or profession.

These, then, are some of the reasons why a prevention or safety program is worthwhile and why to undertake it requires a group, rather than individual, action.

If by now, anyone in the audience doubts the need for control of "malpractice" suits, allow me to quote from the May, 1954, issue of the American College of Radiology News Letter:

"There are many reasons why the entire medical profession today finds itself in the same position that radiology was in 20 years ago. Here are some of the recent causes that have gone into the pot to make hospital and physicians' liability insurance even more desirable from the underwriters standpoint: increased demand for medical and hospital care; legislation increasing hospital specialization, excessive fees; increased public "claim consciousness" bad hospital public relations; hospitalization insurance; dollar "madness"; court interpretations broadening liability in this field; increased costs of legal work and investigation."

"The most potent factor; however, is the ever spiraling inflation and dollar devaluation — to which there seems to be no end— and which has resulted in fantastic judgments being rendered by juries in personal injury and malpractice suits."

Again, quoting from the same article in

connection with the problem of lack of interest by insurance carriers:

"Some few of the companies are reluctantly writing business at the Bureau rates. One company will write for only their own agents and will cover x-ray therapy, providing the assured has been certified by the American Board of Radiology or is a member of the American Roentgen Ray Society or the Radiological Society of North America. Another company will write for its own agents only and will not write or renew existing policies for brokers. In addition, the applicant must promise the company all of his insurance business as collateral."

* * * *

Physicians are in jeopardy until the insurance industry again is **interested** in insuring them. This will not occur unless and until the risk in professional liability insurance is lessened materially. The **risk** won't decrease of its own accord. A real, vigorous and widespread but grass roots program — by the medical profession itself — to educate its members to their legal duties, to advise and assist when trouble brews, and to fight relentlessly all unjust claims, is the only prudent course of action, if disaster is to be avoided.

CORRECTION

In the July President's Page Message, the last paragraph read as follows: "The committee chairmen and committee members will be announced in the next issue of the Journal. I hope we need not agree with the chairman who in his annual report stated: "In most kindred associations half the committee" In most kind associations half the committee nothing. I am pleased to place on record that in my committee it is just the reverse." President Spiry's original copy was correct and not as the above. The error was made by our printers and proof reader.



Let me tell you about a man I had a visit with several days ago. An old man, a doctor who has never taken time for a vacation, or taken the time to develop a hobby. A doctor that has been so busy practicing medicine for nearly fifty years, that he felt a vacation or a hobby was a sheer waste of time. Let me use his own words. "Doctor, I envy you today as I have never envied anyone in my life. You seem to find time to carry on your practice, still—you find time for civic affairs, for professional societies and service clubs. You have developed a hobby that gives you pleasure I have never experienced. You also seem to find time for a certain amount of travel. Above all, you seem to get a huge kick out of life. How in the world do you manage to do these things?" I could quote this doctor for hours for I have known him many years. He is a very dear and respected friend. I know as he



reads this he will have no ill feelings towards me for he will feel as I do, that it may help some younger doctor who is still at an age where he can develop a very acute interest in a hobby that will give him an unbounded amount of pleasure, also develop an interest in the affairs of our medical societies, and above all, can find time to attend meetings and time for well earned vacations. Things that will not take anything away from his practice, will bring no criticism upon his head from his patients. Things that will give him a better understanding of people and prolong his own span of active, worthwhile practice. But let me again quote this same doctor, when he was advised to take things easy a few years ago. "I tried to take the vacation, but it turned out to be a terrific chore and a flop. You see, I never learned to relax, and never developed a hobby that I could fall back on as I grew older. Yes, I too used to urge my patients to take their well earned vacations. As for me — well, I was too busy, too hard pressed financially — oh, I thought of dozens of reasons for postponing that fishing trip, that trip to a world series or just that little cross-country jaunt my famly urged me to take with them."

My only wish is that I could have prevailed on this old friend to write this president's page for me. He could without a doubt write it much more eloquently and effectively than I.

During the past weeks, I have had the good fortune of visiting two of our districts. The Black Hills District on August 12th at the Spearfish City Park, which was coupled with "Trout Feed" that will long be remembered. The meeting of the Aberdeen District was equally enjoyable. Here the group catered more to a cattle man's fancy — You have seen the slogan, "Beef for Health" and, unquote, the ranchers' pocket book. The very informality of these two meetings impressed me. I enjoyed the members speaking out in no uncertain language on controversial subjects. More power to them. Before my year as your president is over I want to visit each of your districts. I am going to, whether I am invited or not. However, it would make it more convenient if I had an invitation to carelessly leave on my desk for my office force to read, lest they say more or less critically, "The Old Man is taking off for another ball game."



JOHN A. KITTELSON, M.D. 1887-1954

Dr. John A. Kittelson, Sioux Falls, passed away at his home Wednesday, August 18th following a brief illness. He was active in the practice of medicine until his death.

Born April 2, 1887 at Arendal, Norway, Dr. Kittelson came to the United States an orphan when he was 13 and made his home with his brother.

After being graduated from Poynette Academy in Wisconsin, Dr. Kittelson attended Beloit College and received his Bachelor of Science degree in 1913. He attended medical school at the University of Wisconsin for two years and then entered the University of Minnesota medical school from which he was graduated in 1917.

Dr. Kittelson taught anatomy at the University of Nebraska medical school in 1917-18 and practiced in St. Paul, Minn. and Tolley, N. D. before coming to Sioux Falls in 1926. In 1948 he joined practice with his son, Dr. H. O. Kittelson.

The former Blanche Otis and Dr. Kittelson were married July 22, 1909 at Poynette, Wis. They recently had celebrated their 45th wedding anniversary.

Dr. Kittelson was a fellow in the American College of Surgeons and was secretary-treasurer of the American Academy of General Practitioners in South Dakota. He was past president of the medical and associated staff at Sioux Valley Hospital.

He was also a member of the First Lutheran Church, the Kiwanis Club and Knife and Fork Club. He was a member of the U. S. Army Reserve during World War I.

Survivors include the widow and one son; three daughters, Miss Eva Kittelson, Great Neck, N. Y., Mrs. Leslie Meyer, Greenville, S. C., and Mrs. Maurice Hopkins, Washington Court House, Ohio, and six grandchildren.



THE UNHEALTHY TREND OF HEALTH INSURANCE

Prepayment hospital and medical insurance has exerted and will continue to exert a marked effect on the conduct of medical practice. It has proven to be a very effective method of financing unexpected large hospital and medical expenses, especially major hospital expenses.

The tremendous success and growth of prepayment health insurance has brought with it a threat to the private practice of medicine and has created problems and irregularities which should be corrected for the benefit of all concerned and for the welfare of the entire program.

At the present time, many policies require hospitalization for the payment of medical services. Hospitalization solely for diagnostic procedures transfers medical practice from the office of the physician to the hospital and places the hospital in the undesirable position of practicing medicine as a corporation. Medicine practiced largely in hospitals is more easily subject to various forms of socialization and promotes non-medical domination and controls.

The demand for hospital beds is rising to a considerable extent due to the increasing number of diagnostic cases hospitalized only to satisfy insurance requirements. Attempts are constantly being made to extend and use insurance for coverage which is economically unsound. Insurance is designed to meet unexpected and uncontrollable major expenses which lead to financial catastrophe.

Insurance cannot economically cover routine or anticipated minor medical or hos-

pital expenses or elective diagnostic procedures; anyone unable to meet these expenses is also unable to pay the necessarily high premiums for coverage by insurance. Deductible insurance similar to automobile collision insurance would substantially reduce premiums of both hospital and medical insurance, eliminate small claims which are not a monetary burden to the insured and enable more individuals and families, including those over sixty-five years of age, to carry insurance for major hospital and medical expenses.

Many hospital insurance plans do not allow adequate coverage for room, diets, operating and obstetrical rooms, general nursing care and strictly hospital services so attempts are frequently made to cover this deficiency by additional payment for professional services. Premiums could be lowered if these practices were corrected and the medical profession could more actively endorse and support good hospitalization insurance plans.

To avoid confusion regarding hospital and medical services, protect our hospitals from being forced into practicing medicine, and to preserve private practice, the principles as set forth by the American Medical Association should be followed. On December 3,1953, the House of Delegates of the American Medical Association meeting in St. Louis, Missouri, passed a resolution "To condemn all insurance contracts classifying any medical service as a hospital service and to reiterate the earlier, and continually emphasized premise, that radiology, anesthesiology, pathology and physiatry are the practice of medicine." In addition the American Medical Association resolution reaffirmed all past actions of the House relating to hospital encroachments into the practice of medicine: "With

respect to hospital expense benefit insurance the House at its 1937 annual meeting . . . stated: "The subscribers' contract should exclude all medical services — contract provisions should be limited exclusively to hospital facilities. If hospital service is limited to include only hospital room accommodations such as bed, board, operating room, medicines, surgical dressings, and general nursing care, the distinction between hospital and medical services will be clear."

Private insurance companies for the most part have failed to apply this differentiation. This failure has helped the shift toward hospital practice of medicine as opposed to private practice. Because of this increasing trend toward hospital practice, not only for inpatients but also for out-patients, the physician is more and more placed in the position where opposition to governmental and lay controls would be futile. Furthermore, domination by government is simplified and hastened when institutions must subject themselves to governmental regulations to obtain appropriations.

Reconsideration of the health insurance problem in South Dakota is in order and steps should be taken now; (1) to preserve the private practice of medicine for patients and physicians, (2) increase strictly hospital benefits for hospitals, (3) reduce prepayment health insurance premiums for the benefit of the public, and, (4) separate hospital and medical services. Otherwise private practice will slowly but steadily be replaced by hospital practice which could become subject to complete lay and governmental control.

Prepayment Health Insurance Committee

THE MONTH IN WASHINGTON

While Congress didn't enact all the health bills President Eisenhower's administration wanted to put through, it did mark up an imposing record of accomplishment. In fact it passed more health and medical legislation than any Congress in many, many years. The AMA actively supported most of the bills finally enacted, and opposed none of them.

Four important new laws were written into the statutes before the session ended — expansion of the Hill-Burton hospital construction program, expansion of the vocational rehabilitation program, amendment of the income tax law to allow more liberal deductions for medical expenses, and transfer of the responsibility for health of the Indians to U. S. Public Health Service.

For years a group of state health officers have been working to bring about the transfer of Indian hospital and medical service from the Indian Bureau in the Department of the Interior to Public Health Service in what is now the Department of Health, Education, and Welfare. The health officers could show beyond any question that the Indians were receiving far less medical care than the rest of the poulation. They maintained that if the Public Health Service were made responsible for the Indians' health, there would

be a rapid change for the better on the reservations.

What might be called governmental inertia succeeded in holding up the legislation for a time, but this Congress decided to make a shift. Public Health Service, which will take over on the reservations next July 1, already has plans under way to insure the Indians more and better medical care.

The demands for a more dynamic vocational rehabilitation program have been building up outside the federal government as well as in Washington. The problem facing this administration was to get more people rehabilitated but at the same time to induce the states to take a more active part in the work. The law now enacted promises to do this. It authorizes gradual increases in the federal appropriations, but at the same time is aimed at bringing the states up to the position of full financial partners by the end of five years. The goal is to rehabilitate at least 200,000 persons annually, in place of the present 60,000.

If local communities are willing to raise from one-third to one-half of the cost, the new Hill-Burton program should result in the construction, within three years, of possibly a half billion dollars in new facilities — rehabilitation centers, diagnostic-treatment

clinics, chronic disease hospitals, and nursing homes. (This program was discussed in detail last month in this space.) The new construction will be in addition to the continuing Hill-Burton grants for complete hospitals.

On the medical cost deduction question, too, economists long have felt that families with unusually large medical expenses should be given more liberal tax deductions. The new law will allow them to deduct medical expenses in excess of three per cent of taxable income. Under the old law the figure was five per cent. A \$3,000-income family with \$150 in medical expenses under the old law could deduct nothing, but under the new law \$60. The Treasury estimates that the total saving to families will be \$30 million.

The general public probably read and heard more about the one bill that was defeated reinsurance — than it did about all the health and medical legislation that passed. That defeat (in the House) was a surprise and a disappointment to the President. His advisors might have told him that all was not well, but obviously they did not. Opposition was not confined to the AMA. Also lined up against it were most of the health insurance companies, the U.S. Chamber of Commerce and a number of other professional groups. The labor unions would accept it, but wouldn't work to get it. Most significant of all, it had lukewarm support at best from the lawmakers who know most about it, the Senate and House committees that conducted the hearings.

MEDICAL BOOKSHELF

The state journals are read by the practicing physician, not only for the articles of medical interest and papers presented at various meetings, but also, for the local state news, for interesting bits of information, for the editorials, for notices of meetings and occasionally for the ads with their clever advertising.

The presidents page of the July 1954 Wisconsin Medical Journal, p. 388 carries an appeal to physicians throughout the state to make their contributions to the Student Loan Fund of the State Medical Society for the purpose of assisting those young men who lack funds but who are not lacking in ambition or ability to attend medical school. Through the Student Loan Fund the practicing physicians of the state are working against the law of the "survival of the financially fittest" and demonstrating their worthiness and allegiance to the oath of the immortal Hippocrates made some 24 centuries ago; "I will impart knowledge of the art to my sons and to those of my teachers and to disciples bound by a stipulation and oath according to the law of medicine."

The Journal of the Iowa State Medical Society for August 1954, p. 365 contains a significant article by Owen H. Wangensteen, professor of surgery of the University of Minnesota Medical School entitled "The sur-

gical treatment of peptic ulcer." His summary presents the following pertinent observations:

- 1. Satisfactory operations are now available which thwart the ulcer diathesis in an effective and lasting manner. These are particularly significant for patients between 40 and 60 with persistent difficulty.
- 2. The hazard of confusing a benign gastric ulcer with cancer is very real.
- 3. Tunular gastric resection is the most acceptable type for gastric ulcers.
- 4. Hemorrhage is the most important single cause of death from peptic ulcer. It should be reviewed as an indication for operation.

In this same issue p. 379 Franklin H. Top, Professor and Head of the Dept. of Hygiene and Preventive Medicine at the State University of Iowa reviews the factors in the causation of recognizable poliomyelitis, including the host, parasite and environmental-factors. He states that poliomyelitis may generally lie, not so much in parasite variations as in non-immune factors affecting the host and perhaps in environmental changes. The excellent bibliography is of value for research.

Minnesota Medicine for July 1954, p. 520 describes four new phamphlets suitable for doctors offices or for distribution which cover various aspects of medical public relations. There is one on research, one on choosing a

family doctor before illness strikes, one on how the A.M.A. stands guard behind the doctors subscription and one on warnings about healers who guarantee cures. The address for sending for these is State Office, 496 Lowry Medical Arts Building, St. Paul, Minn.

The New England Journal of Medicine now in its two hundred fifty-first volume is an outstanding state journal. In the May 27, 1954 issue p. 895 is found an article by Stephen W. Meagher and others entitled Appendicitis in children. This reviews children under 13 years of age subjected to appendectomy at the Boston City Hospital from Jan. 1, 1950 to Jan. 1, 1953. Out of 405 cases 43 elective "interval appendectomy" were performed with improvement resulting. In children the most reliable criteria for establishing the diagnosis of appendicitis are abdominal pain, vomiting, low grade fever, leukocytosis, increased spasm of the abdominal musculature in the affected side and localized tenderness.

"AN OPEN LETTER"

TO: Contributors to the American Medical Education Foundation

FROM: Dean W. L. Hard, School of Medicine, University of South Dakota

Our sincere thanks for placing our school above all other (6) basic science schools of the country in the amount of money contributed during the fiscal year 1953-54. A grant totaling \$13,393.00 was received from the National Fund for Medical Education in which is included the designated donation (\$4,268.00) from physicians and the District Auxiliaries made to the American Medical Education Foundation. Balance of the funds to the total grant awarded were contributed by business and industrial concerns. Grants awarded by the N.F.M.E. are allocated to two year schools on a basis of \$7,500.00 plus \$25.00 per student plus the individual gifts designated for the given school. Four year schools receive \$15,-000.00 plus \$25.00 per student plus the designated awards.

The past four years in particular have shown a marked inflationary trend with a corresponding reduction in the value of the salary dollar to the faculty member and increases in cost of teaching equipment and materials. During this time interval we have received state appropriations sufficient to permit only about 10% increase in faculty salaries, and an equivalent amount for maintenance and operation. It is evident these appropriations have not kept pace with the ever-increasing cost index of recent years. The continued maintenance of our present accredited educational program will obviously depend on the contributions made to the American Medical Education Foundation and, on the part of industry, to the National Fund for Medical Education.

On behalf of the medical faculty, please accept our sincere appreciation for the fine interest shown in our medical school as is so clearly manifested by your contributions. "The best is yet to be."

PHYSICIANS OFFICE SUITE

In Sioux Falls

Waiting Room, Lab, 2 Examining Rooms and Office

Available About Jan. 1st

Contact

CHAS. VAN DE WALLE

Van De Walle Pharmacy

or

HARRY LEE

NATIONAL RESERVE LIFE INSURANCE CO.



This is your

MEDICAL ASSOCIATION

AMA COUNCIL STUDIES PLACEMENT

Richard Leigh, Northwestern University Medical student, spent the week of August 16th in South Dakota gathering information for a study of placement in rural areas which is being made by the AMA's Council on Medical Service.

With S. D. Med. Ass'n. executive secretary, John C. Foster, visits were made to Parker, Platte, Woonsocket and Iroquois.

Plans call for publication of a brochure this Fall describing how rural towns in Michigan, Kansas, Tennessee, New Jersey, and South Dakota attract practitioners.

ST. LUKE'S MEDICAL STAFF MEETS

"The medical staff of St. Luke's Hospital in Aberdeen had a luncheon meeting in the private dining room at the Capitol Cafe on Friday, July 30. The luncheon was held in honor of Doctor J. C. Ohlmacher who is resigning from his position as pathologist in St. Lukes Hospital on August 1st. Doctor R. G. Mayer, Immediate Past President of the South Dakota State Medical Association. presented Doctor Ohlmacher with the Distinguished Service Award; which was granted to him at the State Medical Convention held in Huron in May.

Doctor C. L. Vogele, chairman of the staff, also presented Doctor Ohlmacher with a cash gift from the members of the medical staff to be used for the purchase of a Television set. Doctor Ohlmacher is returning to his former home at Vermillion where he resided so many years while a member of the faculty of the University of South Dakota Medical School."

RYNEARSON TALKS TO HILLS GROUP

Dr. Edward H. Rynearson of the Mayo Clinic was the featured speaker at the annual summer meeting of the Black Hills District Medical Society. Over sixty members heard the presention on thyroid disturbances given in an open-air meeting.

Dr. A. W. Spiry, president of the State Association and **John Foster**, executive secretary both spoke.

Drs. Guy F. Zarbaugh and James Mattox, Deadwood were accepted as new members.

7th DISTRICT HEARS SMITH

The Seventh District Medical Society meeting at the Cottage in Sioux Falls September 7th heard Dr. Richard Smith of the University of Minnesota speak on "Recent Progress in the Management of Complications of the Neonatal Period."

SUPPLEMENT TO 1954 ROSTER

Andre, H. G., M.D. Vermillion

Baker, C. E., M.D. Belle Fourche

Chapp, J. D., M.D. Yankton

Erickson, J. W., M.D. Rapid City

Fritz, W. H., M.D. Mitchell

Kalda, E. F., M.D. Platte

Johnson, C. A., M.D. Belle Fourche

Johnson, E. A., M.D. Milbank

Michael, A. C., M.D. Vermillion

Reagan, James, M.D. Sioux Falls

Van Demark, Guy, M.D. Sioux Falls

NEWS NOTES

Dr. E. F. Rose has joined the Lemon Clinic in association with Drs. Totten and Steiner.

Dr. C. L. Bury, Geddes, suffered a light stroke July 29th.

Dr. Melvin Marousek, formerly located at Yankton, is now associated with **Dr. John L. Calene** in Aberdeen.

Dr. John W. Donahoe, Sioux Falls, has been named South Dakota Governor for the American Diabetes Association.

Dr. Theodore F. Riggs, Pierre, in practice since 1909, has retired at the age of 80. He and Dr. A. A. McLauran established the Pierre Clinic in 1917. Dr. Riggs is a charter member of the American Board of Surgery and is a past president of the South Dakota State Medical Association.

The "Uranium Room" at Canistota, run as a "healing" institution by an unlicensed practitioner, was reported as having been padlocked by the F.B.I.

MRS. J. R. WESTABY PASSES AUGUST 16

Mrs. J. R. Westaby, pastpresident to the Auxiliary of the South Dakota State Medical Association died August 16th in Madison.

Mrs. Westaby was born in Hassock Falls, N. Y. in 1884, took nurses training and was married to Dr. J. R. Westaby in 1914 in North Pownal, Vermont.

They lived in Clark, S. D. until 1919 when they moved to Madison. Mrs. Westaby was active in community service work as well as the medical auxiliary.

She is survived by her widower and three children.

FRANK CREAMER, M.D. DIES AT IOWA CITY

Dr. Frank Creamer, for many years in practice at Le Beau and Dupree, S. D., died August 14th at the University of Iowa Hospital in Iowa City.

He had recently been living at Boone, Iowa and was buried in the family plot at Belle Plaine, Iowa.

Survivors include his wife, two sons, two daughters, and five grandchildren.

CARL SEEMAN, M.D. DIES AT AGE 86

Dr. Carl Seeman. age 86, for 42 years in practice at Tulare, passed away in Miller, August 9th.

Dr. Seeman was born in Clinton, Iowa, and was educated at St. Louis University Rush Medical College.

He practiced in Tulare until two years ago when he retired to live in Miller.

He is survived by his wife, three daughters, one son, nine grandchildren, and one great grandchild. Burial was at Tulare.

CHEST SURGEONS LIST OFFICERS

The American College of Chest Physicians registered 1150 physicians and guests at its 20th Annual Meeting held in San Francisco, California, June 17-20, 1954. This was the largest registration of any

of of the previous College meetings held on the west coast.

The following officers were elected for the year 1954-1955:

President

William A. Hudson,
Detroit, Michigan
President-Elect
James H. Stygall,
Indianapolis, Indiana
First Vice-President
Herman J. Moersch,
Rochester, Minnesota

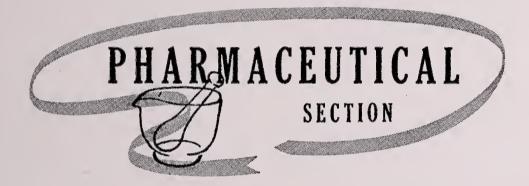
Dr. William L. Meyer of Sanator is Governor of the College for South Dakota.

The 21st Annual Meeting of the College will be held in Atlantic City, New Jersey, June 2-5, 1955.

HEREDITY STUDY STARTS ON MS

Approximately 35 pairs of twins from 19 states throughout the United States and from Canada, resonded to the recent nationwide appeal for identical twins afflicted with multiple sclerosis, according to Dr. Harold R. Wainerdi, Medical Director of the National Multiple Sclerosis Society.

As a result of the successful appeal, made with the cooperation of hundreds of newspaper editors, preliminary verification for research into the possible hereditary and environmental causes of the crippling disease has gotten underway. Through its Committee on Genetics, the Society plans to commence its research project as soon as sufficient data on the volunteer twins have been amassed. and examples of twins have been selected to meet the rigid requirements of the proposed study.



HAROLD S. BAILEY, PH.D.
EDITOR
Division of Pharmacy
College Station, South Dakota



THE RETAIL PHARMACIST AND PUBLIC RELATIONS* Harold S. Bailey, Ph.D.**

What is the greatest problem facing the profession of pharmacy today? If I were able to ask each of you this question individually and take down your answers, they would be many and varied. They would probably include such critical subjects as increased overhead, product duplication, too much or not enough federal regulatory interference, inadequate margins, inability to keep up with professional literature, supermarket drug counters, illegitimate sales of prescription item drugs, high cost of medicine and fair trade price-chiseling.

A great deal has been said and written about these vital problems of our profession. However, there is another problem --- one that I feel is of equal if not greater importance than some of those I have just mentioned. This is the problem of Public Relations. Without the respect and confidence of the public, the members of our community and our colleagues in the other public health professions, how can pharmacy advance? As Robert E. Abrams, Executive Secretary of the American College of Apothecaries, recently said, ". . . the soul of our profession is the esteem which the public and our sister professions hold for pharmacy. Without this soul, pharmacy cannot continue to progress."

Public Relations Affect All

In the last few years, retail pharmacy has been troubled by bad publicity. Unfortunately, in the public eye we are judged

*Presented to the South Dakota State Pharmaceutical Convention, Aberdeen, 1954.

**Associate Professor of Pharmaceutical Chemistry, Division of Pharmacy, South Dakota State College. not by the vast majority of good that we do, but by the worst. So far we have done an exceptionally mediocre job, and in some cases nothing at all, to counteract this bad publicity.

I would like to give you a few examples where pharmacy has suffered recently from adverse publicity.

1. In its annual report for 1952 the Food and Drug Administration points out that 80 percent of its criminal cases on drugs were brought against firms and individuals charged with illegal retail sales. That sounds very imposing until you check the number of cases and find that the total number of such cases was 108, and 80 percent of that is 86. And 86 out of more than 100,000 registered pharmacists in the United States is less than nine one-hundredths of 1 percent, or less than 1 in a thousand.

This means that 99.91 percent of the pharmacists of the United States are being held up to public scorn by the Food and Drug Administration for the derelictions of nine one-hundredths of 1 percent.

Dr. Robert Fischelis commented on this adverse publicity before the House or Representatives Committee on Interstate and Foreign Commerce hearings on the Factory Inspections Bill. I will quote from his testimony.

"We feel there has been a great deal of publicity given to these isolated cases of violations. I have a letter here I received just a few days ago from the dean of the College of Pharmacy of the University of Iowa in which he complains bitterly about the kind of publicity that comes out of the Food and Drug

Administration in connection with cases of this kind. He sent me a newspaper clipping from an Iowa newspaper which reads as follows:

'The sale of sleeping pills and other drugs has been described by the Government officials as an acute problem linked with juvenile delinquency in a great many communities. Commissioner Crawford of the Food and Drug Administration in testimony to the House Appropriations Committee said his agency's inspectors have run into serious problems in the field in Dallas, Houston, New Orleans, Boston, Denver, and Seattle.

Crawford's testimony was made public by the committee today. He says there are 55,000 retail drug stores and undetermined numbers of other sources of sleeping pills and other drugs all dangerous when taken without advice of a doctor.'

"That clearly implicates the 55,000 drug stores of the United States. They do not hear what Mr. Crawford has said here today that the great majority of the pharmacists are law abiding. They read these statements based on the isolated cases described and indict an entire profession.

"That is the sort of thing that we think is unfair and we believe that the local authorities, especially our State boards of pharmacy and the departments of State governments which enforce State food, drug, and cosmetic acts, are competent to handle these things, and they do not need to go to the Food and Drug Administration."

2. Another example of this type of publicity which penalizes the entire profession for violations committed by a few concerns the testimony of Robert H. Cunningham, chairman of an Oklahoma House Committee which investigated the use of barbiturates and amphetamine sulfate by teen-agers. Mr. Cunningham told of the investigation which substantiated police charges that 250 youngsters were using barbiturate and amphetamine. These teen-agers had little difficulty getting drugs from druggists who sold them liberally without prescription, he stated. "We blame the druggists for this," he continued, "we blame the good druggist who is honest. They are so anxious to make a sale they believe anything. Surely the druggists of America, not only Oklahoma, are not that hard up for business."

Can you imagine the headlines that would accompany those charges. They would certainly not call attention to the fact that only 5 out of the 950 licensed drug stores in that state were guilty. In the mind of the layman, suspicion is cast over the entire profession including pharmacists of other states. Are we effectively combating this publicity today? Will the public always be notified of the failings of a minority of our profession without hearing of the contributions of pharmacy to Public Health?

- 3. A third example of an area in which adverse public opinion has been displayed concerns that "High Cost of Medicine" question. There seems to be a general feeling that the cost of medical care has increased. In particular, as you know, the public feels that the pharmacist is responsible for the high prices of drugs. To a certain extent this misconception is shared by members of our sister professions in the public health fields.
- 4. Fair trade has also been in the news lately in many states. Fair trade laws have always had trouble passing legislative bodies. This is due not to a majority in opposition to fair trade, but by a very vicious and vociferous minority. This minority attempts to impress upon legislative bodies that they, in effect, represent the consumer. Actually, they represent only their own selfish interests. Fair trade did not become an issue in the last legislative session here in South Dakota. However, we must not relax our efforts to educate the consumer public to the advantages of fair trade. The opponents of fair trade are always alert and have been active recently in other states and the District of Columbia. We must anticipate them with an effective public relations program for fair trade.

These four examples show that public relations affect all of us in the profession — manufacturer, wholesaler, retailer and educator. Public relations is every pharmacist's responsibility. Since we are grouped into one profession, we are no stronger than our weakest link. The actions of one segment of the profession, whether good or bad, affect each and everyone of us.

Faculty Assist in Public Relations

The Division of Pharmacy is concerned about the part that we as pharmaceutical educators can play in promoting better public relations for pharmacy. Early this year the faculty cooperatd with the Extension Service of South Dakota State College in preparing a traveling exhibit designed to present the many services that the College has for the people of South Dakota. This display was exhibited in 25 South Dakota towns over a six week period. Over 18,000 people were counted in attendance at this exhibit. Featuring the theme, "Guarding Your Health," the booth was composed of articles centering around the area in which services are performed by the pharmacist to aid in the maintenance of good community health. Those areas are, of course, prescription compounding, baby health, sick room, first aid, pest control and animal health supplies. Members of the teaching staff of the Division of Pharmacy accompanied this exhibit.

Other activities of your pharmacy faculty include participation in high school career days and radio programs. During the past year we have cooperated with the radio department of the college in the production of several programs discussing various aspects of the profession. We have presented such topics as the educational background of the retail pharmacist, the cost of medical care, and animal health pharmacy. We also cooperated with the Department of Nursing Education in presenting a program. Activities such as these benefit all of us by making the lay individual more pharmacy conscious.

Programs of the Division of Pharmacy that indirectly affect public opinion are the annual Pharmaceutical Institute and participation in the publication of the South Dakota Journal of Medicine and Pharmacy. If you as practicing pharmacists are aided professionally through these media, then relations between the pharmacist and the public are aided.

Retailer Greatest Spokesman

Let us return to the subject of our discussion — "The Retail Pharmacist and Public Relations." Out of all segments of pharmacy, the retail pharmacist can be and should be the greatest champion and spokesman for the profession. You are the ones who contact the public. It is by your actions and work that pharmacy is judged by the public. Pharmacy as a profession has a great story to tell. Are you doing your part?

Let us look at some of the methods by which the retail pharmacist can aid in the betterment of our relations with the public.

First, and I believe most important, is the appearance of our business establishments and the attitude of the store personnel. We could call it plain common sense and good business practice to have a neat, clean store and courteous clerks. It is also good public relations. The impression made by yourself, your clerks and the condition of your store is going to determine whether the customer returns or takes his business elsewhere. This impression also determines whether the customer thinks of pharmacy as a professional calling or an occupation somewhat akin to that of our friends in the hardware, grocery or paint business.

Take, as a sample, the label on the prescription you have just compounded. Does it represent you and your store as being of professional caliber? Or is the label a permanent repository for the fingerprint of your right thumb?

One of the most frequent criticisms I have of our students in the course called "Prescription Practice" is the typing over of letters on labels. To me a label which has a misspelled word or a letter typed over or printing smeared means that the individual is naturally sloppy and probably compounded the prescription in a similar manner. I am of the opinion that the customers' impression of your ability as a professional individual is based to a great extent on your labels. After all the layman has no idea whether you prepared the capsule so that it actually does contain the 1/120 gr. atropine. He places his trust in your professional ability to compound accurately. A poor label could well create a seed of distrust in that ability.

Service Our Greatest Asset

Secondly, I feel that the greatest weapon that pharmacy has in the battle for professional recognition is service. Take away the service to the public that results from our scientific training and educational background and some of our sales are identical with those that could be made in a variety store. We must concentrate on using this weapon to fight the constant enroachment on our business by the supermarket drug counters and those of the laity who contend that pharmacy is simply a matter of transferring

100 capsules from one bottle to another.

Included in this matter of service to the public is the responsibility of the retail pharmacist to keep abreast of the advances in pharmacy so that information about these advances can be made available to the public and our sister health professons. This can be accomplished by faithfully reading the professional publications and promotional literature and faithfully attending local society meetings, conventions such as this, national conventions, if possible, and the Division of Pharmacy Seminars.

It may seem rather obvious from your own experience that the pharmacist finds it a little difficult to "keep up" with the new drugs coming on the market. However, consider the busy physician. He not only must read the professional literature in his own field in order to keep up with the latest in medicine and surgery; but he is also constantly being exposed to a barrage of new product literature. It is little wonder, therefore, that the physician who seriously tries to keep up with the new drugs and therapeutic trends turns to his best source of information, the well-educated professional pharmacist. Here we have a tremendous opportunity to be of service. In pharmaceutical education we realize this opportunity. The modern pharmaceutical curriculum is constructed so that the graduating pharmacist has the necessary background in pharmacy, pharmacology, organic chemistry, biochemistry and medicinal chemistry to be of assistance to the physicians in this area. Service to the public and to our sister professions in the public health field has been and always will be one of the strengths of pharmacy.

Economic Angle Important

Another way in which the retail pharmacist can promote better public relations is to assist in educating the public about the economic and social side of pharmacy. This is every bit as important as the scientific side of our profession. For example, most people are not looking for bargains in medicine. They are willing to pay a fair price for good professional pharmaceutical service. A fair price is one which is fair to both the patient and to yourself. It is very wrong to overcharge for your services but it is just as wrong to undercharge. After all, the financial well-being of your store is directly related to the well-being

of your community. No one questions your right to make a realistic profit on your investment.

Facts Prove Drug Costs Reasonable

These statements lead directly to the question of the so-called high cost of medical care. By answering your customers with the facts, you can do a great deal to create goodwill and promote good public relations for our profession. Let us answer the question, "Are Drugs Really Expensive?" Here are the Facts:

1. In 1952, according to the U. S. Department of Commerce, the following are the amounts spent per capita in the United States for various services and commodities:

Alcoholic Beverages	\$55
Tobacco Products	\$32
Auto Repairs and Maintenance	\$11
Amusements	\$10
Drug and Sundries	\$10

These figures substantiate the statements of Dr. Theodore Klumpp when he told the Rutgers Pharmaceutical Conference that, "... the public's sense of values is wrong ... the public does not mind paying \$1.50-\$2.00 for a box of candy but complains when a prescription costs about the same amount."

- 2. In 1929, the American Public spent slightly over 3½ billion dollars for medical care or approximately 4.1% of the national income. In 1951, the total spent for medical care was about 9 billion or approximately 4.3% of the national income. In 1929, out of each medical care dollar 19.5 cents went for drugs and sundry items. Today only 17 cents of the medical care dollar goes toward paying for drugs and sundry items. Yet the public believes that drug costs are unreasonably high.
- 3. It also helps to point out that the cost of our new drugs is very low compared to the expense of former methods of treatment. For example, the cost of a mastoid operation used to be no less than \$250. Today, in most cases this operation can be prevented with an expenditure for specific medication totaling less than \$25, but the public does not know this.

Another example of the comparatively low cost of our "miracle drugs" was given by Dr. Ivor Griffith recently. He pointed out that 20 years ago a case of lobar pneumonia could cost a patient \$1,000 in hospital, nursing and medical bills, and loss of wages. Today a few antibiotic injections or capsules can eliminate

pneumonia at an overall cost of less than a fifth of what it used to be.

4. If a patient's life is saved or if he is returned to his normal activity and able to continue earning his living, is it too much to ask that he pay a minute part of the cost of the research that produced this drug. With life and productivity on the one hand and, sickness, suffering or death on the other hand, he is certainly getting a bargain.

To summarize, let me state the problem this way. The facts about the cost of drugs show that the profession of pharmacy does not have to make apologies. However, we must educate the consumer and tell him about the factors of research, production and distribution which determine the cost of drugs.

I have just scratched the surface concerning the ways in which the retail pharmacist can promote good public relations. Time will not permit elaborating on other methods of equal importance. However, I would like to call attention to the suggestion of your past president, Chan Shirley, as outlined in his presidential address at the 1953 Convention. Mr. Shirley proposed that a speakers bureau be formed within this association in order that pharmacy be presented before service clubs, on the radio and television, at P.T.A. and high school career days. This is an excellent method by which we can work together to promote our profession.

The pharmacist has held a position of respect and integrity in the eye of the public for centuries. He is the physician's right hand and service for the betterment of community health is his motto. We dare not lose that respect. We must not allow isolated yet powerful adverse publicity to taint the entire profession. Public relations is the job of everyone in pharmacy but the greatest responsibility rests on the retail pharmacist. You are the direct link with the public. It is through you that the man in the street views the whole profession.

It would be well for us to keep in mind these words of Abraham Lincoln as a guide in this matter. "With public sentiment, nothing can fail — without it, nothing can succeed."

Something NEW is Cooking



MORE INSURANCE NOW AVAILABLE





SPECIFIC BENEFITS ALSO FOR LOSS OF SIGHT.
LIMS OR LIMES FROM ACCIDENTAL INJURY
HOSPITAL INSURANCE ALSO FOR OUR MEMBERS AND THEIR FAMILIES.

\$4,000,000 Assets \$20,000,000 Claims Paid 52 Years Old

Physicians Casualty & Health Ass'ns.
Omaha 2, Nebraska



ZIRADRYL CREAM

Description: A combination of hydrated zirconium carbonate with Benadryl hydrochloride in a water-miscible base.

Action and Indications: For the prevention and treatment of poison ivy and poison oak. The cream helps protect against the dermatitis resulting from exposure to poison ivy and oak if applied before contact with the plants or as soon as possible after contact. The product offers both the chemical neutralizing action of zirconium and the antihistaminic effects of Benadryl for topical application.

Urushiol (an orthodihydroxbenzene derivative) is the toxic agent in poison ivy and, in contact with zirconium, combines to form a non-irritating salt.

Several clinical studies have been reported using zirconium preparations. In one, 47 patients were treated with a zirconium preparation for dermatitis following exposure to ivy poisoning. Within 24 hours after beginning treatment, 29 showed relief from the itching and inflammation had subsided.

In another study, a zirconium-antihistamine preparation was used to treat army personnel about to enter an area having a heavy growth of poison oak. One group of 323 soldiers were instructed to apply the cream on exposed areas on entering the field, on arising daily and after washing. A second group of 228 used a placebo cream, and an additional 355 received no medication

Of those treated with the zirconiumantihistamine cream, 9.6% showed signs of dermatitis, while the incidence of poison oak in the other groups was 21.9% and 20.6% respectively.

How Supplied: Ziradryl Cream is supplied in one-ounce tubes.

Source: Parke, Davis and Company, Detroit, Michigan.

BLASTOMYCIN

Description: A sterile filtrate from the culture of the mycelial phase of Blastomyces dermatitidis grown on a liquid synthetic medium.

Action and Indications: An aid in the diagnosis of North American Blastomycosis (Gilchrist's Disease) and the differentiation from other similar infections, such as certain forms of tuberculosis, syphilis, and some other fungus-type infections. Blastomycosis is a fungus infection which may occur in any part of the body, but particularly attacks the skin, lungs and bones, resulting in lesions.

Dosage: The recommended test dosage is prepared by diluting the vial of concentrated Blastomycin (.01 cc.) with 1.0 cc. of diluent. In performing the test 0.1 cc. of the diluted Blastomycin is injected intracutaneously into the forearm of the patient and the reaction is read 24 to 48 hours later.

Both the tuberculin and histoplasmin tests should be employed in conjunction with the Blastomycin in order to exclude the possibility of tuberculosis and histoplasmosis.

How Supplied: In two 1-cc. vials, one containing .01 cc. of Blastomycin and the other containing 1 cc. of diluent. Once the material has been diluted it may be kept for 30 days at refrigerator temperature without loss of

potency.

Source: Parke, Davis and Company.

BLUE TONGUE VACCINE

Description: An avianized harmless live virus type vaccine, grown in fertile hens' eggs.

Action and Indications: Blue tongue, a virus disease which has long been a problem to sheep raisers in South Africa, appeared in this country in 1953, although it is suspected to have been in Texas for about ten years under the name of sore muzzle.

The virus is spread principally by gnats. The season runs from midsummer to the first frost when insects are abundant. Symptoms show up three to six days after infection when animals become feverish and dull. The tongue, throat and parts of the head swell; diarrhea and cloudy eyes may occur.

The disease is fatal in about one out of five infected sheep, but secondary effects include poor wool condition, loss of weight and screw worm infestation, resulting in severe economic loss.

Dosage: It is recommended that Blue Tongue Vaccine be administered every year to all sheep in areas where blue tongue has appeared. The vaccine should be administered, regardless of weight or age, in the early summer.

How Supplied: Blue Tongue Vaccine is supplied in 25 and 100 dose vials.

Source: Lederle Laboratories Division, American Cyanamid Company.

ACHROMYCIN OPHTHALMIC OINTMENT

Description: Achromycin Ophthalmic Ointment contains 10 mg. per gram (1%) of tetracycline HC1 in a petrolatum-lanolin base.

Action and Indications: Indicated in the treatment of ocular infections caused by gramnegative bacteria. It is effective in infectious keratitis, conjunctivitis and blepharitis.

How Supplied: Available in \(\frac{1}{8} \) ounce tubes, packaged 6 to a carton.

Source: Lederle Laboratories Division, American Cyanamid Company.

LENTE ILETIN (INSULIN, LILLY)

Description: A new kind of long-acting Zinc-Insulin suspension produced without the use of a foreign protein modifying agents. Discovered by K. Hallas-Moller, Ph.D., and his associates in the Novo Laboratories in Copenhagen, Denmark, Lente Insulin represents a new concept in the chemistry of long-acting Insulin because of its method of preparation.

To achieve long action it has been customary to add protein modifying agents such as protamine or globin to Insulin preparations. This makes the Insulin less soluble so that it will be released slowly in the body.

Dr. Hallas-Moller and his associates discovered they could make zinc-Insulin crystals which contained a higher than normal percentage of zinc without the use of the modifying agent. Under certain conditions of preparation and use, they obtained crystals that contained enough zinc to be relatively insoluble at the slight alkalinity of the body tissue fluids.

Although the quantity of zinc in Lente Insulin is "high" — 0.2 mg. of zinc for each 100 units, or ten times as much as is found in the regularly available crystalline Insulin preparations — it is not excessive, being the precise amount of zinc used in the protamine zinc insulin modification.

By using different methods of precipitation, the Danish scientists could obtain Insulin in either its crystalline or noncrystalline form. The noncrystalline, or amorphous, type they called Semilente Insulin. It is a quick-acting preparation whose effect on blood-sugar levels lasts about twelve hours when given to diabetics. The crystalline type was named Ultralente because its action is prolonged, lasting in excess of thirty-six hours when injected into diabetic patients

Trying to find a preparation with a duration of action most suitable for the average diabetic, Dr. Hallas-Moller conducted a series of trials which demonstrated the best combination to be a mixture of 30 percent Semilente Insulin and 70 percent Ultralente Insulin. It was this combination that he called Lente Insulin, and it is the one which Eli Lilly and Company is marketing under exclusive license in the United States.

Action and Indications: The clinical tests have shown that Lente Iletin (Insulin, Lilly) most nearly resembles in its action NPH Iletin (Insulin, Lilly), which controls the average case of diabetes mellitus on a one-injectiona-day basis. Lente Insulin's duration of action is only slightly longer, the investigators have found.

The clinical trials have further demonstrated that, for the most part, the two Insulin preparations can be used interchangeably. Usually the patient can be transferred successfully on a unit-for-unit basis. But clinicians have cautioned that the change should be made only under direction of the patient's doctor.

It is probable that physicians in this country will regard the difficult case of diabetes as offering the best opportunity for Lente Iletin (Insulin, Lilly) to demonstrate its usefulness. Physicians may want to test it first on patients who require multiple doses for control, or who must take more than one type of Insulin. The patient allergic to protein modifying agents in present Insulin preparations may hope to obtain relief. In time, other patients may be transferred to Lente Insulin because of its greater purity.

How Supplied: Lilly is supplying Lente Iletin (Insulin, Lilly) in a new 10-cc. vial with a hexagon neck — "Hexanek," it's called. This helps identify the new preparation and prevent confusion. Lente Insulin comes in two strengths, designated U-40 and U-80 and containing, respectively, 40 units and 80 units per cc.

Forrest Teel, Lilly's executive vice-president of marketing operations, said initial deliveries to druggists would be limited to a small percentage of their normal Insulin stocks.

Source: Eli Lilly and Co., Indianapolis, Indiana.

INFILTRASE

Description: Infiltrase is a highly purified hyaluronidase obtained from animal sources.

Action and Indications: Infiltrase is a mucolytic enzyme which hydrolyzes hyaluronic acid, the gel which serves like a "cement" in the ground substance of connective tissue. This hydrolytic action permits the more rapid dispersal in the tissues of fluids administered subcutaneously or intramuscularly.

The action persists to some degree for about 24 hours. No action on the intercellular cement substance of capillary endothelium has been noted, nor does Infiltrase have any untoward effect on kidney function, blood pressure, respiration or body temperature, even in doses far exceeding the recommended therapeutic quantities.

Infiltrase is indicated in the administration of solutions, drugs or anesthetics, in hypodermoclysis, in pudendal block, in subcutaneous urography, and in certain tissue fluid accumulations, such as hematoma, hemarthrosis and postoperative ophthalmic edema. It is also valuable in the management of selected cases of renal lithiasis.

Infiltrase hastens the infiltration or spread of fluids through the tissues. It thus also reduces local swelling and pain. It is easily given anywhere, requiring no intricate equipment or specially trained personnel. Sensitivity is rare and toxicity practically negligible. It is nonirritating because of its high degree of purity, and has excellent stability.

Dosage: One cc of sterile normal saline solution is added to the contents of one vial containing 150 T.R.U. of Infiltrase. In most cases, this is sufficient for one dose when mixed with the solution to be injected.

In hypodermoclysis, the Infiltrase solution is injected into the rubber tubing close to the needle as soon as clysis has started, so that it is carried into the tissue with the solution.

In local anesthesia the Infiltrase solution is added to a mixture of 0.5 cc of epine-phrine hydrochloride 1:1,000 and 25 cc of the anesthetic. For subcutaneous urography, the Infiltrase solution is mixed with five cc of 1% procaine and injected subcutaneously over each scapula. Five minutes later, 50 cc of a mixture of 80 cc normal saline and 20 cc of 35% iodopyracet solution is injected subcutaneously over each scapula.

For pudendal block, a solution of 300 T.R.U. of Infiltrase in two cc of normal saline is added to four minims of epinephrine hydrochloride 1:1000 and 60 cc of 1% procaine.

Precaution: Test for sensitivity before administration. Do not inject directly into inflamed or infected areas.

How Supplied: As a white lyophilized powder, completely water-soluble; in one cc vials each containing 150 turbidity-reducing units, packed in boxes of three of 25 vials;

or in 10 cc vials each containing 1,500 turbidity-reducing units, packed in cartons of 10 vials.

Source: Armour Laboratories, Chicago.

CHLORMYCETIN INTRAMUSCULAR

Description: A specially prepared microcrystalline form of chloramphenicol intended for suspension in an aqueous vehicle for use only by intramuscular injection.

Action and Indications: The product is effective over the same wide range of clinical entities which have been found to respond to chloromycetin given orally. Chloromycetin is indicated for use in the treatment of a large number of bacterial, viral and rickettsial infections.

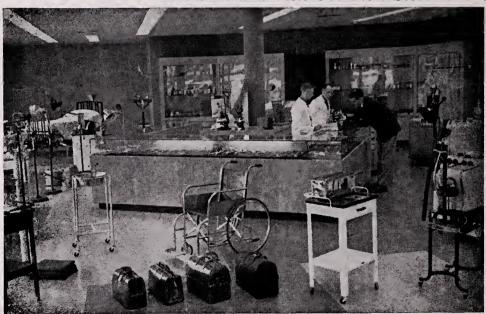
Dosage: To prepare Chloromycetin Intramuscular for injection, 2.5 cc water for injection or, if desired, physiologic sodium chloride solution is added to the contents of the Steri-Vial with sterile syringe and needle. After mixing thoroughly, the resulting suspension contains 1.0 Gm. Chloromycetin in 2.5 cc., and can be given readily with a syringe using a 20 or 21-gage needle.

Because of the repository quality of Chloromycetin Intramuscular, an adult dosage schedule of 1.0 Gm. given every 8 to 12 hours has been effective in severe infections. Children weighing 15 Kg. or less should receive up to 100 to 150 mg. per Kg. of body-weight per day in divided doses for most susceptible infections; heavier children, 1.0 gm. every 12 hours.

How Supplied: Steri-Vials containing 1.0 gm. Source: Parke-Davis and Co., Detroit, Michigan.

Whenever You Are In Sioux Falls

Be Sure and Visit Our New Store



Complete Line of Equipment, Supplies and Drugs

KREISER'S Inc.

21st & Minn.

Sioux Falls, S. D.



CURRENT STATUS OF FAIR TRADE LAWS

A total of 16 high state courts have upheld the constitutionality of their states' fair trade laws to restrain unfair competition since the advent of fair trade in 1931, according to a new report on the status of the fair trade statutes, published by the Bureau of Education on Fair Trade.

Four high state courts—those of California, Delaware, New Jersey and New York — have upheld the constitutionality of their state fair trade laws under the McGuire Act, passed by Congress in 1952 to restore the effectiveness of fair trade in transactions involving interstate commerce.

Test cases are now pending in three states — Arkansas, Nebraska and Pennsylvania — on the constitutionality of the statutes under the McGuire Act, the report notes. Pennsylvania is one of the 16 states whose high court upheld the constitutionality of the state act before the passage of the McGuire Act.

The key federal court decision on fair trade, the report points out, are the Old Dearborn decision of the U. S. Supreme Court in 1936 "in which the Court unanimously upheld the constitutionality of the state fair trade laws including the non-signer provision of these laws," and the decision of the Fifth U. S. Circuit Court of Appeals of June, 1953. The latter decision, in the Lilly-Schwegmann case, upheld the constitutionality of fair trade under the McGuire Act. It was this decision which the U. S. Supreme Court twice refused to review in the fall of 1953, thus leaving intact both the Fifth Circuit and Old Dearborn decisions, the report notes.

Two test cases are now pending in lower Federal courts on the question of whether mail order operators in non-fair trade areas are prohibited, under the McGuire Act, from violating the fair trade laws of other states. The Federal District Court of Maryland and the New York Court of Appeals have already ruled that, under the McGuire Act, mail order operations violating fair trade prices cannot be carried on between states with fair trade laws.

In two states — Florida and Michigan — high state court rulings have invalidated the non-signer clause but they have also upheld the use of signed fair trade contracts, the Bureau report notes.

Giveaways like trading stamps, cash register coupons, etc. are prohibited in conjunction with the sale of fair-traded products in the fair trade laws of 20 states, according to the summary.

The new report is being distributed to retail and wholesale trade associations over the country in fields concerned with fair trade, as well as to manufacturers, lawyers and others interested in making the fair trade laws more effectively than ever against the unfair competition of price-juggling.

Mid-Summer Developments

Mid-summer developments on fair trade found the Federal Trade Commission and the Department of Justice on the opposite sides of the fence over the proposed fair trade bill for the District of Columbia.

The FTC went on record as "not opposing" fair trade for D. C. because of Congress'

position on the fair trade laws of 45 states. Commissioner Albert A. Carretta, on his own, urged passage of a D. C. fair trade law to protect neighboring states from "unfair competition from the District."

The Department of Justice, however, continued to oppose a D. C. fair trade law, with oral testimony by Antitrust Division Chief Stanley Barnes before the Senate District Committee's sub-committee.

Fair Trade and the Retail Druggist

Sales figures continue to tell a good story for the retail druggist. Estimates by the U. S. Dept. of Commerce for the first half of 1954 show retail drug volume at \$408 million — up four per cent from June of 1953.

A. C. Nielsen's year-end report for 1953 revealed an eight per cent gain over 1952 for the small independent druggist (averaging under \$50,000 a year). He now accounts for 21 per cent of the total drug store volume which in 1953 came to \$4,782,000,000 — up three per cent from 1952.

In this period of gain for the retail druggist, the job of making fair trade work has marched forward more briskly in the drug field than in any other.

MEDICINAL MARKET REPORT

A preliminary U. S. Tariff Commission report was released late in July. The report covers production and sales of medicinals for the year 1953.

The commission reported that the total sales of medicinals had climbed from 50.8 million pounds in 1952 to 54.2 million last year. However, dollar value of medicinal chemicals declined from \$429.8 million in 1952 to \$409.1 million in 1953. Total production of medicinals decreased slightly from 66.8 million pounds to 66.6 million.

Antibiotics. Last year production and sales of antibiotics continued to rise. Total production for human and veterinary use reached 1.63 million pounds in 1953 compared to 1.49 million in 1952. Although antibiotic sales increased from 1.32 million pounds in 1952 to 1.47 million in 1953, the unit value of antibiotics dropped sharply from \$201.79 per pound in 1952 to \$157.79 in 1953.

The price decline was mainly due to the sizable overproduction of penicillin in the industry's greatly overexpanded manufacturing facilities coupled with the failure of export and government orders to materialize. The unit value of penicillin salts fell from \$288 per billion international units to \$163.13 last year. Production in 1953 was 381.6 trillion international units compared to 342.3 trillion in 1952.

Sale of antibiotics for use in animal feed supplements climbed from 172,000 pounds in 1952 to 391,000 in 1953. Since the antibiotics enable poultry and swine to grow faster and heavier with consumption of less feed, sales for this purpose are expected to increase even more during 1954.

Sulfonamides. Despite the use of antibiotics, sulfa drug sales have held up well. In 1953, total sales of sulfa drugs were 3.06 million pounds. This is only slightly lower than the 1952 figure of 3.09 million pounds. Production, however, fell from 5.79 million in 1952 to 4.67 million in 1953. Continued use of triple sulfa combinations have helped sustain demand for this group of chemicals.

Vitamin gains. Production of vitamins increased markedly last year. This was mainly due to increased use in food products to boost nutritional value. For example, oleomargarine must have 15,000 USP units of vitamin A added per pound in order to be on a par with butter.

Vitamin C production soared from 1.4 million pounds to 2.1 million in 1953. Vitamin C is widely used to minimize discoloration and flavor change in frozen fruits.

Thiamine and other B vitamins increased in production, also. For example production of vitamin B_{12} jumped from 94 to 387 pounds. Incidently, the unit value of B_{12} in 1953 was a sensational \$74,709 per pound.

PHARMACY Rews

Newly Registered Pharmacists

Bliss C. Wilson, Secretary of the South Dakota State Board of Pharmacy recently announced that 27 men and women successfully passed the 1954 examination for registration in pharmacy.

The Board examinations were held May 25-27 on the State College Campus at Brookings. All of the newly registered pharmacists graduated from the Division of Pharmacy at State College and completed the year of internship under supervision of a registered pharmacist as required by state law.

The new South Dakota pharmacists and their registration numbers are listed below:

James J. Ahearne 3095

Vernon D. Akkerman 3096

Donald C. Asbjornson 3097

Robert E. Barr 3098

Norbert J. Bartel 3099

David W. Bohn 3100

Robert J. Deal 3101

Wayne L. Eberhard 3102

Marlyn E. Graham 3103

Frederick C. Henning 3104

Jack A. Landers 3105

Clyde J. Mork 3106

Harold C. Nelson, Jr. 3107

Weldon E. Norberg 3108

Eugene W. Palmer

Walter Robb 3110

Shirley W. Tompkins 3111

Lyle D. Wiersma 3112

Kenneth W. Carroll 3113

Mrs. Lois Eng 3114

Karoline Hansen 3115

Robert E. Landes 3116

Eugene Todd Martin 3117

Douglas J. Silvernale 3118

Gerald J. Staudenmier 3119

Carveth S. Thompson 3120 Mrs. Cynthia Johansen 3121

PHARMACY GRADUATES RECEIVE COMMISSIONS

Reserve commissons have been awarded this summer to seventeen pharmacists who earned them through the Reserve Officers Training corps at South Dakota State College.

Students may qualify for reserve commissions by taking four years of ROTC training at State College and attending a summer camp.

Pharmacists receive army commissions in the medical service corps after summer camp at Fort Sam Houston, Texas. The new second lieutenants are Donald Berg, Hills, Minn.; Richard Bloemke, Springfield, Minn.; Donald Ekdom, Brookings; Robert Ehrke, Groton; Marvin Erickson, Spearfish; Jerry Hahn, Doland; Robert Landes, Pierre; E. Todd Martin, Rapid City; Thomas Miller, Alpena; James Page, Sisseton; Allen Pfeifle, Beresford; Edward Staudenmier, Humboldt; Carveth Thompson, Faith; Murray Widdis, Sioux Falls; Maris Williams, Ipswich; and Robert Williams, Rapid City.

COLUMBIA PLANS PHARMACY MEET

Announcement of a special scientific congress to be held in New York on October 14 and 15 devoted to a review of the present status of research and treatment of critical diseases and to a forecast of future research has been made by Columbia University's college of pharmacy.

The two-day "Bicentennial Conference," entitled "Pharmacy and the Conquest of Disease," will be dedicated to the major advances made in recent years in the treatment of disease and in public health and to a forecast of future research developments. It is a part of the year-long observance of the bicentennial of the university and a tribute to the hundred twenty-fifth anniversary of the founding of Columbia's college of pharmacy.

DARGAVEL FOUNDATION ACTS FOR FLOOD-HIT DRUGGISTS

The recent floods in Texas and Iowa spurred the John W. Dargavel Foundation to take its first action in July in behalf of retail druggists in distress, according to Albert C. Fritz of Indianapolis, Foundation president. Letters were sent to four retail druggists in Eagle Pass, Texas, inquiring whether they need financial assistance because of extensive flood damage to their stores.

Mr. Fritz obtained the

names of the druggists from C. J. M. Roesch, secretary of the Texas Pharmaceutical Association, and is awaiting their replies. He had also written to Dale L. Bruner, secretary of the Iowa Pharmaceutical Association, who advised that flood damage in his state was confined largely to farms.

In his letter to the four Eagle Pass druggists, Mr. Fritz pointed out that "the Foundation has not yet raised its quota and is, therefore, not operative, but in worthy cases it is possible that we might be able to help."

A non-profit corporation, the John W. Dargavel Foundation was founded in the name of the executive secretary of the National Association of Retail Druggists. Its purpose is to "help individual retail druggists cope with serious reverse of misfortune and make loans available to students of pharmacy in need of such assistance."

The Foundation's plans call for a capital fund of \$250,000, to be raised by contributions from all segments of the drug industry. Mr. Fritz noted that "it is hoped to raise the entire quota by the time of the N.A.R.D.'s annual convention in Houston in October."

The Board of Trustees consists of Albert C. Fritz of Indianapolis; Dr. Frank Moudry of St. Paul, Minn.; and John Goode of Asheville, N. C., all past presidents of the National Association of Retail Druggists; Roy S. Warnack, retail druggist, of Los Angeles; George Van

Gorder, president of McKesson & Robbins, Inc.; James Hill, Jr., chairman and president of Sterling Drug, Inc.; and L. D. Barney, president of Hoffmann-LaRoche, Inc.

The Executive Committee of the Board of Trustees consists of Mr. Fritz, Dr. Moudry and Mr. Van Gorder.

The Advisory Committee currently has 15 members as follows: Moe G. Brudno, druggist, Boston, Mass.; Edgar S. Bellis, NARD past president, Bronxville, N. Y.; John J. McKeighan, druggist, Flint, Mich.; Willard B. Simmons, druggist, Texarkana, Tex.; Charles S. Beardsley, chairman, Miles Laboratories Inc.; Harry Kimbriel, vicepresident, Eli Lilly & company; Jean Despres, executive vice-president, Inc.; O. J. Cloughly, president, St. Louis Wholesale Drug Co.; Roy V. Schwab, Brunswig Drug Co., Los Angeles; Mrs. Thelma M. Coburn, executive secretary, Alabama Pharmaceutical Association; Henry M. Moen, executive secretary, Minnesota State Pharmaceutical Association: John W. Myers, executive secretary, Chicago Retail Druggists Association; Richard Hopelain, executive secretary, Northern California Pharmaceutical Association; Dr. Robert L. Swain, editor, Drug Topics, and Dr. Ivor Griffith, president, Philadelphia College of Pharmacy and Science.

18th Century Apothecary Shop Reconstructed



The exterior view of the Lederle Old Apothecary Shop shows the mural, the brick paving, the iron cleats in the steps, old "bullseye" glass above the door, hand split shingles, and other details of construction.

A trip into pharmaceutical history was recently enjoyed by a group of distinguished visitors to Lederle Laboratories Division, American Cyanamid Company, Pearl River, N. Y.

The occasion was the official opening of a reconstruction of an 18th Century Apothecary shop as a permanent exhibit to illustrate the strides pharmacy has made in the past two centuries.

The exhibit is located in the lobby of a modern four story building where much of Lederle's packaging and manufacturing is done.

Facing the old Apothecary shop on the opposite side of the lobby, is its counterpart, a modern ethical pharmacy.

The old shop is as nearly

authentic as possible. The shingles of the shop are hand split; the clapboarding is narrow and rounded; the "street" is paved with the same brick used in the reconstruction of Williamsburg, Va. On the wall behind the shop is a photomural depicting an actual house in Williamsburg. It effectively suggests a street in a small colonial town.

The glass in the windows of the shop and in the steeet-lamp is wavy and distorted. The bullseye glass over the door was imported from England. The steps are fastened with iron cleats, in the manner of the period.

When the exterior of the shop was finished it looked beautiful — and brand new, an anacronism that immediately became apparent to Dr.

John Bird, co-ordinator of new product development, who was in charge of the project. Thereupon the construction crew set to work and succeeded in aging the paint and plaster, and bringing out old cracks in the door.

The interior of the shop is dimly lit as if by candles and oil lamps.

The shelves are lined with antique drug jars, some of which still contain their original ingredients.

The labels on these jars were made of thin sheets of glass, heated and bent to fit the bottles. The letters were then printed on them in gold or black. They were fastened to the bottles with wax or other suitable material.

The shop is filled with antique pharmaceutical equipment that has either been loaned or given by friends of Lederle who were interested in the exhibit.

There is an old mortar made of lava stone that dates back to the early American Indians. Some of the hand balances still have their original weights, including the obsolete "scruple."

There is a spiked plate used to extract citrus oils. Next to it is a quassia wood cup that made its own bitters. By filling it with water at night and drinking it in the morning, the patient got his medicine right from the wood of the cup.

Among those who visited the laboratories were: Dr. Newell Stewart, President-Elect of the American Pharmaceutical Association, and Executive Vice-President of the National Pharmaceutical Council; Dr. Robert P. Fischelis, Executive Secretary



The interior of the Lederle Old Apothecary Shop has been reproduced as faithfully as possible. Many of the drug jars and cans shown in the shelves still contain their original ingredients.

of the American Pharmaceutical Association; Dr. John O'Neill Closs, Executive Secretary of the American Pharmaceutical Manufacturers Association; Mr. George Grif-

fenhagen, Associate Curator, Division of Medicine and Public Health, Smithsonian Institution, Washington, D.C., and Consultant to the A.Ph.A. Museum; Mr. Howard B. Fonda, Vice-President of Burroughs-Wellcome; and Mr. M. S. Barker of Magnus, Mabee and Reynard.



MULTIPLE MYELOMA Lester E. Wold, M.D. Fargo, North Dakota

Probably the most widely known fact about multiple myeloma among physicians and medical students is the association of Bence-Jones protein with this disease. It was in 1948¹ that Henry-Jones first described a "hydrated deutoxide of albumin" in the urine of a patient with particularly fragile bones.

In 1889² Kahler pointed out that deformity and fragility of bones, bone pain, cachexia and the presence of Bence-Jones protein in the urine almost always indicated multiple myeloma.

Two types of bone lesions are seen in this disease. Punched out osteolytic areas were initially described. These were particularly noted in the skull and flat bones. One of the features of this type of lesion is the lack of bone proliferation or sclerosis at the periphery of the lesions. They are frequently multiple and represent plasmacytomas. The other bone lesion is a diffuse demineralization of the skeleton and resembles the lesions seen in senile or postmenopausal osteoporosis.

More recently the extra-medullary lesions³ in multiple myeloma have been emphasized. This has led some to propose that multiple myeloma is a neoplastic disease of the skeletal system with metastasis. Most authors, however, agree that we are dealing with a generalized disease of the hematopoetic system. Extra-medullary lesions are accounted for by

* Presented to the S. D. Medical Association, Huron, S. D., 1954.

† Department of Internal Medicine, Fargo Clinic, Fargo, N. D.

accepting the myeloma cell to be derivatived from the reticulo-endothelial system. Shapiro and Watson⁴ in 1953 demonstrated that in patients with multiple myeloma there are relatively the same percentage of myeloma cells in marrow and splenic aspirations. They presented this as evidence of the autochthonous origin of the disease, i.c. rising spontaneously in the spleen and marrow. Even though this hypothesis is supported by most hematologists, it must be stated that the cause of multiple myeloma is unknown.

We have recently reviewed 17 cases of multiple myeloma seen in our Clinic over the past six years and would like to present a few of the clinical features and laboratory findings in this group of patients.

CHART I MULTIPLE MYELOMA

Decade	Cases
20-29	1
30-39	0
40-49	1
50-59	5
· 60-69	6
70-79	4
males	

8 females

Youngest pt. 28 years of age.

Oldest pt. 77 years of age.

Although multple myeloma has been reported in a patient less than 20 years of age,

the bulk of the patients are found in the sixth and seventh decades. This was true in our group where all but two of them were over 50 years of age. The youngest patient was 28 and the oldest was 77. It is usually held that males predominate over females in a ratio of about 2 to 1 in this disease. In our series there were 9 males and 8 females.

CHART II MULTIPLE MYELOMA

Clinical Manifestations

	Cases	%
Bone pain	15	88
Mult. bone lesions	8	47
Path. fracture	7	41
Extramed. lesions	5	30
Pneumonitis	6	35
Neurological signs	5	30
Hemorrhagic tendency	1	6

Bone pain is the most characteristic symptom of multiple myeloma and it is this bone pain that usually brings the patient to the clinician. Usually fleeting and gradual in onset, it may, however, be abrupt as when associated with a pathological fracture. The pain may be migratory and it varies all the way from mild intermittent distress to pain of such exquisite severity that the patient lies immobile in bed, inasmuch as motion, coughing or sneezing aggravate the pain severely.

Root pain is fairly frequent because of the high incidence of vertebral involvement with pathological fracture and root pressure. Spontaneous remissions from pain do occur and make clinical evaluation of any therapy exceedingly hazardous. Fifteen of seventeen patients in our group (88 per cent) had bone pain. Favorite locations are low back and thoracic cage. In our group the pain was nearly as often located in the interscapular area. The pain, however, may be generalized. Although skull lesions are common none of our patients had pain in that location. It does, however, occur. Eight of our 17 patients had multiple bone lesions as determined by x-ray. Seven of the patients in our group (41 per cent) had pathological fractures. Six of these were in the vertebra; one was in the humerus. Extra-medullary lesions were reported in 5 of the 17 patients. Hepatomegaly and splenomegaly were noted in 4 of the 17 cases. In one patient with hepatomegaly cervical adenopathy was also detected. A fifth patient had a soft tissue lesion extending from the third and fourth thoracic vertebra and was demonstrated by x-ray as a thoracic tumor.

For some time it has been known that patients with multiple myeloma frequently have pneumonitis. The clinical features of this pneumonitis are frequently its recurrence and very slow resolution. The original explanation for this phenomena was mechanical. Gesheckter and Copeland as early as 1928 suggested that the pneumonia was due to deficient aereation because of painful respirations as well as the debilitated state of the patient and resulting hypostatic changes. Emphysema secondary to dorsal kyphosis has also been offered as an explanation for recurring bouts of pneumonitis in patients with multiple myeloma. More recently⁵ the demonstration of decreased antibody titer in patients with this disease has provided us with a more logical explanation for this phenomenon.

Six of our patients had pneumonia. In 2 of the 6 pneumonia was terminal. In an additional two instances there was more than one bout of pneumonia. On two occasions the clinical feature of the pneumonitis was its very slow resolution.

Neurological involvement is not uncommon in multiple myeloma. One patient already mentioned with a thoracic tumor presented with a picture of transverse myelitis. Decompression was done. A tumor was found in the epidural fatty layer and was found to completely envelope the cord. A second patient complained bitterly of paresthesias. Two patients had the clinical picture of a peripheral neuritis and one patient had what might well have been a coincidental Bell's palsy.

An unusual bleeding tendency was found in only one of our 17 cases. This was associated with a low platelet count and demonstrated by hemorrhagic skin lesions and epistaxis. She was also one of the 2 patients in our group in whom plasma cells were prominent in the peripheral smear.

After introducing this subject with the remark that Bence-Jones protein probably is the most widely known feature of this disease, we find ourselves in the awkward position of

trying to explain why we were unable to demonstate this "abnormal protein" in any of our cases. In four of our cases we were never able to demonstrate albuminuria. In the rest of the cases albuminuria was significant, frequently 4+, but it was also inconstant. Bence-Jones protein was searched for but obviously not searched for enough, even though several of the patients had three or four determinations in the laboratory in an attempt to demonstrate this abnormal protein. We are willing to accept the fact that Bence-Jones protein occurs in upwards to 50 per cent of cases of multiple myeloma but wish to emphasize that if we are anxious to demonstrate it, it may be necessary to follow the patient for a long period of time and to do repeated tests on the urine. It has been pointed out by Snapper that impaired renal function is particularly apt to be seen in those patients who excrete Bence-Jones protein in their urine. Only 2 of our 17 patients had blood urea nitrogen determinations in excess of 30 mg. per cent. In one the blood urea nitrogen got as high as 61 mg, per cent and in a second patient it reached as high as 80 mg. per cent. The fact that we had so few patients with significant azotemia might well explain why we were so unsuccessful in demonstrating Bence-Jones protein.

Another explanation is the fact that all of these patients were private patients. After the diagnosis had been secured by sternal aspiration there was little tendency to do any unnecessary laboratory procedures on these patients.

CHART III MULTIPLE MYELOMA

	Cases	%
Sed. rate elevation	17	100
Anemia	15	88
Hyperproteinemia	7	41
Hyperclacemia (1)		
Rouleaux	6	35
Myeloma cells in peripheral smear	2	12

Sedimentation rates were uniformly elevated. In all but 2 patients values of over 62 mm. in one hour were reported.

Fifteen of the 17 patients had hemoglobin values below 11 gms.; the lowest value reported was 5.2 gms.

In our laboratory 8.2 gms. is considered to be the top normal level for total proteins. Seven of our 17 patients had values exceeding this value. It should be pointed out, however, that even though many of the patients had values for total proteins within normal limits the A/G ration was reversed to 1.1:1 or less in all but four instances.

In our laboratory 9 to 11 mg. per cent is considered normal for serum calcium. In only 1 of 6 patients where calcium determinations were made was this value exceeded. It should be pointed out, however, that in multiple myeloma where albumin values are frequently found to be below normal, normal values for serum calcium could still reflect abnormal bone destruction.

Excess Rouleaux formation was noted in 6 of the 17 patients.

As stated before plasma cells were seen in the peripheral blood smear in 2 of the 17 patients.

As previously mentioned the differential diagnosis of multiple myeloma should include senile and postmenopausal osteoporsis. Because of the similarity in x-ray picture of the bone lesions in hyperthyroidism this disease also should be considered. In addition to the similarity in bone lesions that exists between patients with multiple myeloma and hyperparathyroidism, both groups of patients also frequently have renal calculi. This fact might tend to further confuse the diagnosis. Inasmuch as anemia is such a prominent feature in this disease it is obvious that the differential diagnosis should include any patient with an undiagnosed anemia. These patients all merit a bone marrow aspiration. Many of our patients were discovered in this fashion. It should be emphasized, however, that it may be necessary to do more than one sternal study. This is true because occasionally the lesions are not diffuse and we might by chance miss aspirating myeloma cells. It has been our experience, too, that where we have an equivocal marrow study a second subsequent study may clinch the diagnosis. All but one of our patients had a sternal marrow examination. In three of these patients the diagnosis was not made until the second sternal marrow study was done. Multiple myeloma can be confused with lymphatic leukemia. It is generally accepted, however, that plasma cell leukemia is a variant of mul-

CHART IV

MULTIPLE MYELOMA

Case	Hbg. Gms.	Prot.	A/G Ratio	Sed. Rate	Rouleaux	Calcium	
1	9.8	7.0	1.1:1	97		10.6	
2	6.6		_	62	Yes	_	Myeloma cells in peripheral blood
3	10.0	7.1	1:1	103	_	_	blood
4	13.4	6.32	2.4:1	30		11.0	
5	6.0	10.5	0.28:1	135	Yes	_	Plasma cells
6	5.2	11.0	0.11:1	142	Yes	_	
7	10.2	5.92	1.96:1	102			
8	8.8	7.5	5.05:1	86		10.4	
9	9.0	7.0	.88:1	141	Yes	_	BUN=80
10	6.8	11.94	.18:1	142	_	9.0	
11	8.0	10.55	.65:1	35	Yes	12.5	
12	11.8	6.54	1.23:1	88	_	_	
13	8.8	10.9	0.6:1	7 5	_	9.7	
14	8.0	7.73	.73:1	113	Yes		
15	6.2	7.07	0.8:1	151	-		BUN=61
16	12.4	10.7	1.16:1	91	_	_	
17	11.4	8.46	0.34:1	_	_		

tiple myeloma.

The x-ray picture of giant cell tumors may simulate the bone lesions of multiple myeloma. Giant cell tumors are almost always found at the ends of long bones. Consequently, when one sees what looks like a giant cell tumor but when this lesion occurs in the flat bone one should suspect multiple myeloma. Most patients with multiple myeloma have albuminuria at some time during the course of their illness. Obviously then, nephritis is a disease that should be considered in the differential diagnosis.

Back pain, particularly when it occurs in an elderly individual, should also be considered prominently in the differential diagnosis. As previously mentioned the pain may be mild or it may be excruciating. Because of the fairly frequent involvement of the liver and spleen with resulting hepatomegaly and splenomegaly and occasional lymphadenopathy, clinical pictures easily confused with reticulum cell sarcoma of one of the lymphomata are often seen. Although paramyloidosis has been described in 10 per cent of all cases of multiple myeloma, our small amount of autopsy material failed to demonstrate any such deposition of amyloid.

The therapy of multiple myeloma is discouraging, and as mentioned before difficult to evaluate. Roentgen therapy is still perhaps the most frequently employed method of treatment even though it is recognized that multiple myeloma is not a radiosensitive disease. Its use is palliative. It has been used by Hall and Watkins in combination with radioactive phosphorus. Radioactive stramonium has been used with inconclusive results.

In 1946 interest in stilbamidine as a drug that could favorably alter the course of multiple myeloma became prominent. In recent years enthusiasm for stilbamidine has waned considerably, perhaps because of the introduction of urethane which can be given orally. In our Clinic we use urethane in the treatment of multiple myeloma when bone pain develops. One of our patients has been taking this drug in doses of 25 gr. a day for a period of over three and one-half years. Her bone pains remain minimal. ACTH and cortisone have been tried with equivocal results. Nitrogen mustard has been reported to have very little benefit.

SUMMARY

We have presented the clinical features of 17 cases of multiple myeloma studied in our Clinic the past six years. This disease should be suspected particularly in patients when in the sixth and seventh decades who complain of bone pain, are cachexic, become anemic, demonstrate albuminuria, hyperproteinemia or pathological fractures.

We wish to emphasize the rather frequent occurrence of neurological involvement in this disease as well as the frequent incidence of pneumonitis in patients with multiple myeloma. We wish to point out the rather frequent extra-medullary involvement by multiple myeloma and to emphasize the fact that not infrequently a second or third sternal marrow may be necessary to secure the diagnosis.

BIBLIOGRAPHY

- Bence Jones, H.: On a new substance occurring in the urine of a patient with "mollities ossium." Phil. Tr. Royal Soc. London, 1848, p. 55.
- Kahler, O.: Zur Symptomatologie des multiplen Myeloms; Beobachtung von Albumosurie. Prag. Med. Wchnschr. 14:33:45, 1889.
- 3. Hayes, Daniel W., Bennett, Warren A., and Heck, Frank J.: Extramedullary lesions in multiple myeloma. Arch. Path. 53:262, 1952.
- Shapiro, H. D., and Watson, R. J.: Splenic aspirations in multiple myeloma. Blood; Jrl. of Hematology, 8:755, 1953.
- Zinneman, Horace H., and Hall, H.: Recurrent pneumonia in multiple myeloma and some observations of immunologic response. Presented at the 35th Annual Session of the American College of Physicians, April 5-9, 1954, Chicago, Ill.
- Snapper, I.: Multiple myeloma. New York, New York, Grune and Stratton, 1953.



BRONCHIECTASIS REVIEW OF CASES TREATED SURGICALLY AT THE INGHAM SANATORIUM FROM—11-26-47 to 11-10-53

John E. Summers, M.D.
Arthur Stanley, M.D.
C. J. Stringer, M.D.
Lansing, Michigan

Number of Cases Operated

From Nov. 26, 1947 to Nov. 10, 1953 fortytwo patients were operated upon for bronchiectasis in the Ingham Chest Hospital.

Sex

Twenty-seven of the patients were female, fifteen were males.

The largest number of patients, twelve, were in the third decade of life at the time of surgery for bronchiectasis.

In only a few cases were the symptoms of short duration.

Years						
Patient's Ages	6, 7, 5	11, 17, 17 19, 20, 20 20	21, 21, 23 23, 23, 23 25, 25, 25 26, 27, 28	35, 35, 36 36, 38, 39	43, 44, 47 47, 50, 50	51, 51, 52 53, 54 56, 56, 58
	-					

Age in Years

No. of Patient's	Less than one year	1 yr.	2 yrs.	3 yrs.	4-10 yrs.	10-25 yrs.	all of life
42	2	5	2	5	10	4	14

Duration of Symptoms

Cough

All patients gave a history of having a cough (for duration of cough see above Duration of Symptoms).

Sputum

The amount of sputum raised was small in five patients, moderate in fourteen and large in twenty-three patients.

Hemoptysis

Twenty-two patients gave a history of hemoptysis consisting usually of bloodstreaked sputum although in several instances the bleeding was severe.

Chest Pain

Twenty-five patients gave a history of having had chest pain.

The Lungs on Physical Examination

Abnormalities on physical examination of the lungs were noted in seventeen patients, usually consisting of rales heard over the affected lung.

Abnormal Chest X-ray

The chest x-ray films of thirty-two of these patients were noted to present abnormalities requiring further study. These abnormalities generally consisted of increased vascular markings in the lower lung fields.

The Lung Envolved

Bronchograms made in each case revealed that the right lung alone was bronchiectatic in nine patients, the left lung in sixteen patients and both lungs were bronchiectatic in seventeen patients.

Lobe Envolved With Bronchiectasis

Lobe	No. of Cases	% of Cases
Right Upper Lobe	4	4.5
Right Middle Lobe	24	26.9
Right Lower Lobe	10	11.2
Left Upper Lobe (Exclusive of Lingula)	4	4.5
Lingula	18	20.2
Left Lower Lobe	29	32.6

Thus the order of frequency of envolvement with bronchiectasis is: (1) The left lower lobe. (2) The right middle lobe. (3) The Lingula. (4) The right lower lobe. (5) and (6) The right upper lobe and the left upper lobe (exclusive

of the lingula) tying for the least frequently

envolved site.

Ope	eration Performed	No. of Patients Operated on
1.	Right middle Lobectomy	11
2.	Left lower Lobectomy	7
3.	Left lower lobectomy and lingulectomy	5
4.	Resection of basal segments of le lower lobe and lingulectomy	5
5.	Right pneumonectomy	3
6.	Left pneumonectomy	2
7.	Resection basal segments left lower lobe	2
8.	Right middle lobectomy and resect anterior segment right upper lob	
9.	Resection basal segments right lower lobe	1
10.	Right middle lobectomy and resect of basal segments right lower lobe	
11.	Resection apical-posterior segment left upper lobe	nt 1
12.	Resection of anterior and lingula segments of left upper lobe Two patients had multiple operat for bronchiectasis.	1

Immediate Post-operative Course

Eight patients (19%) had post-operative complications which cleared with treatment. Practically every patient required one or more post-operative bronchoscopic examinations for the purpose of aspirating the tracheobronchial tree.

Complications	No. of Patient	
1. Delayed re-expansion of		
remaining lung	2	
2. Tracheotomy	2	
3. Bronchopneumonia	1	
4. Pneumothorax	1	
5. Right Hemiplegia	1	
6. Empyema	1	

Follow-Up

A follow-up letter was sent to each of the forty-two patients. Twenty-eight patients were contacted, many of these returning to the hospital for examination.

It was found that of the twenty-eight patients seventeen (60.7%) had been cured and had no complaint, eight patients (29%) had been helped but still had some symptoms, and three people (10.7%) stated that they had not been helped by the operation.

Review of the Cases Not Helped

1. Twenty-six old Chinese male with markedly productive cough of five years duration was found after bronchography to have bronchiectasis in the left lower lobe and the lingula. On June 23, 1949 left lower lobectomy and lingulectomy was done. In 1950 bronchiectasis in the right middle lobe was suspected. At the present time (1-18-54) the patient has a markedly productive cough and feels that he was not helped by the operation.

2. Case No. 4829

Twenty-three year old white female with history of markedly productive cough with blood-streaked sputum for five years. Bronchography revealed bronchiectasis in the right middle lobe. On August 23, 1951 right middle lobectomy was done. On September 19, 1954 patient stated that she had a return of all of the original complaints.

3. Case No. 4919

A forty-three year old white female with the history of a productive cough "all of my life" on bronchography was found to have bronchiectasis in the left lower lobe and in the right middle lobe. On December 4, 1951 right middle lobectomy was done. In correspondence in January, 1954 she states that she still has a markedly productive cough and was not helped by the operation.

Of those patients who were helped by the operation but still have some complaints, four have a slightly productive cough with some back pain, one had several hemoptyses in 1953 and two complain of some pain in the operated area of the chest.

The following case is that of a young man with bilateral bronchiectasis who underwent four operations for resection of bronchiectatic lung.

Case Report

Case No. 3881

The patient, a white male, was eighteen years of age when he was first seen in the Ingham Sanatorium in 1948 with the history of a markedly productive cough of several years duration. Figure 1. is a chest x-ray taken on his first admission revealing infiltrations in the right lower lobe and irregularities in the left lower lobe. Figure 2. is a bronchogram showing bronchiectasis in the right middle lobe and the left lower lobe. On July



Figure 1. Case No. 3881 Chest x-ray taken 3-8-48 showing consolidation in the right lower lobe and irregularities in the left lower lobe.



Bronchogram on 6-3-48 showing bronchiectasis in the right middle and left lower lobes.

29, 1948 right middle lobectomy was done. He was re-hospitalized from September 15, 1948 to October 12, 1948 for treatment of empyema. The chest had cleared by November 19, 1948 (Fig. 3). In 1949 bronchography done elsewhere revealed bronchiectasis in the right lower lobe and the left lower lobe (Fig. 4 and 5). Left lower lobectomy was performed. Following this operation the patient had many attacks of pneumonia requiring many hospitalizations.

It became evident that the patient could not live outside of the hospital, as first one side, (Fig. 6) than the other, (Fig. 7) would become consolidated. Following antibiotic and oxygen therapy (with repeated bronchoscopic examinations and aspiration of the secretions) the lungs would clear, the patient would be discharged only to have a recurrence of the pneumonia in a few days.

He was hospitalized in 1953 and, after his condition had improved, bronchography revealed bronchiectasis in the right lower lobe, in the long stump of the right middle lobe, and in the lingula (Fig. 8). On October 5, 1953



Figure 3. Case No. 3881 Chest x-ray on 11-19-48 after middle lobectomy.



Figure 4. Case No. 3881
Bronchogram on 7-25-49 revealing bronchiectasis in the right lower lobe.

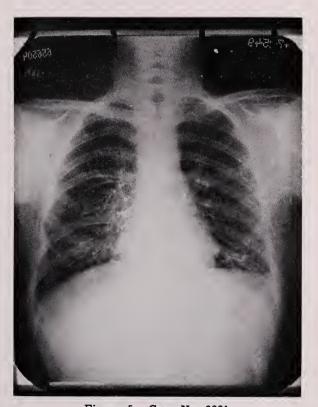


Figure 5. Case No. 3881 Bronchography on 7-25-49, showing bronchiectasis in the right lower lobe, in the bronchial stump of the right middle lobe, and in the left lower lobe.



Figure 6. Case No. 3881
Following resection of the right middle lobe in 1948 and of the left lower lobe in 1949 the patient required many hospitalizations for pneumonia. This chest x-ray taken on 7-30-53 reveals extensive consolidation in the left lung.

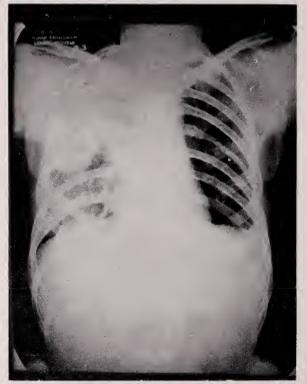


Figure 7. Case No. 3881
This chest x-ray on 9-1-53 reveals extensive consolidation in the right lung. During these attacks the patient was desperately ill.



Figure 8. Case No. 3881
Bronchography on 9-16-53 revealing bronchiectasis in the stump of the right middle lobe and in the right lower lobe.



Figure 9. Case No. 3881 Bronchography on 9-16-53 revealing bronchiectasis in the lingula of the left upper lobe.



Figure 10. Case No. 3881

Chest x-ray taken on 12-11-53 following the fourth pulmonary resection operation. The patient has only his right upper lobe and his left upper lobe minus the lingula.

the lingula was resected. Following the resection the walking index was found to be 31%. On November 10, 1954 right lower lobectomy was performed. On December 14, 1954 the walking index was 34.7%, vital capacity, 1080c.c., and the tidal volume was 400 c.c.

Following the fourth operation the patient did well, was up and about with no difficulty. Figure 9 is his final discharge chest x-ray. Figure 10 and 11 show the patient after the fourth thoracotomy. He has the right upper lobe and the left upper lobe minus the lingula.

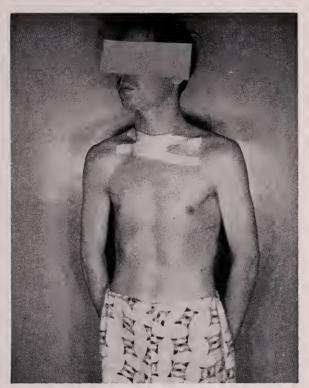


Figure 11. Case No. 3881
Picture of patient following the 4th thoracotomy.
After the 4th operation a tracheotomy was performed to facilitate the aspiration of mucous.
Here the tracheotomy wound is healing.



Figure 12. Case No. 3881
Posterior view of patient prior to discharge. The patient was seen Jan. 6, 1954 and was getting along satisfactorily.



VOLUNTARY HEALTH INSURANCE A Resume of the Situation in South Dakota C. J. McDonald, M.D., Sioux Falls*

In 1947 the South Dakota State Medical Association decided to make available adequate hospital, surgical, and medical insurance through the use of private insurance companies. It was further decided that in the beginning, the Insurance Committee would formulate an original policy and submit it to an insurance company which had not previously sold hospital and surgical insurance. This was done under the name of the South Dakota Plan and was given to one carrier to sell with the understanding that after a few years other companies would be used. As time went on the doctors throughout the state felt that the South Dakota Plan should be changed and that other policies of reputable companies should be approved and come under the plan. This has gradually been done. At the present there are nine approved policies with nine different companies.

Before going into a discussion about hospital and surgical insurance it might be well to understand the following terms: 1. Noncancellable Insurance — a non-cancellable policy, one that also bears the term guaranteed renewable. This means that once a company accepts a policyholder and the premium has been paid, that company must continue to accept renewals up to the age stated in the policy without ridering the policy to exclude certain conditions or cancelling the policy for repeated claims. This is obviously the best type of hospital and surgical insurance to have; but, not many companies sell it, and when they do they will not accept everyone

* Dr. McDonald is chairman of the South Dakota State Medical Association's Committee on Prepayment Insurance. and the premiums are necessarily high. Co-Insurance — this means that the policyholder pays a percentage of every claim and the insurance companies pay the rest. It is usually on a 20% and 80% basis. Much like a similar kind of auto insurance. 3. Catastrophe Rider — this means that for an additional premium some companies will attach a Rider to the policy that will pay up to \$5,000.00 in additional benefits above the face value of that policy. However, these catastrophic Riders are usually on a co-insurance basis. They offer excellent protection for protracted illnesses or injuries. 4. Deductible Hospital Insurance — this means that a hospital policy is purchased much as one might buy car insurance. On any one claim the policyholder pays the first \$25.00 and the company pays the rest up to the limits of that policy.

Under the present plans approved by your committee the following is possible:

- 1. To buy a non-cancellable family hospital and surgical policy. Once this policy is bought, neither the policy holder or any of his family can be cancelled out or ridered. The policy is renewable until the age limits put forth for the policies are reached.
- 2. To purchase a policy where the company pays the first \$100.00 of any claim and 80% of anything above that up to \$1,200.00. This is a very good example of co-insurance.
- 3. The purchase of hospital policy that pays all expenses except blood transfusions for 70 days in a ward bed in a participating hospital. It is rumored that

this policy is soon to be withdrawn although the committee feels that it offers excellent protection.

- 4. To purchase a hospital policy where the first \$25.00 is paid by the policyholder. This is a good example of deductible insurance but, the writer has been told that it has not sold well. This is difficult to explain as most people now buy auto insurance in this matter. To buy a policy on a group basis in a small rural community through the local banker who acts as an agent for the company. This group rate is not only less than an individual policy rate, but, can be paid in monthly premiums through the bank.
- 6. To purchase a policy that will pay for a year in a hospital for any one illness or accident. This is not attached as a rider, but, it is in the body of the policy and represents a new type of catastrophic protection not previously available.

While the committee feels that the above policy gives the patient adequate hospital, medical, and surgical protection, they are not satisfied that these or any other policy at the present gives the practicing physician ade-The committee feels quate protection. strongly that the insurance carriers should separate the hospital benefits from medical and surgical benefits. This subject is well covered in an editorial in the September Journal. It seems ridiculous that a policy should pay full benefits for x-ray, lab-work and etc. in a hospital and pay not all or only part for the same work done in a doctor's office. The committee would like to see future policies include the following:

- 1. Separation of hospital and medical benefits as stated above.
- 2. More use made of deductible type insurance. This would eliminate many small claims that are costly to audit and would

permit either the premiums to be lowered or the benefits to be increased.

- 3. A type of co-insurance in most policies. This would give a patient interest in the charges he might be running up if he had to pay even 25% of them.
- 4. An increased use of catastrophic riders be made in policies on a deductible and co-insurance basis. For example, have the first \$50.00 to \$100.00 paid by the patient and then have the insurance company pay 75% of everything above that up to possibly \$10,000.00.
- 5. Some method worked out for people over 65 years of age should obtain hospital and medical coverage. Co-insurance would work well here.

Your committee would also like to see the South Dakota Insurance Laws changed by the legislature, so as to have some check on the fly-by-night companies in this state. Under existing laws these companies can come into an area for a few weeks hiring inexperienced salesmen whose commissions are usually half the first years premium on all the policies sold, plus a membership fee for each policy. These companies then would pull out leaving the buyers to the policy, not only with poor protection, but, with no one to service them. This could partly be prevented by making a membership fee illegal in this state. Also, it should be mandatory that a photostatic copy of the application should be a part of a policy. Too many times a policyholder is told in making a claim that he stated something else in his application that would prevent them from paying that claim. Not ever having seen the application he can hardly argue otherwise. All of these things give hospital and surgical insurance a bad name and does more than anything else to hinder the sale of a good policy. It is hoped that some of these proposed changes may become part of our insurance law in this state.



TUBERCULOSIS CONTROL AND CASE FINDING

Tuberculosis is still a major health problem. Because of the development of new drugs and new surgical techniques, the death rate from tuberculosis is decreasing, but the incidence is increasing. It has been estimated that of the 400,000 active cases in this country, approximately 240,000 are unhospitalized and in a position to spread the disease.

Three years ago 373 persons in South Dakota died of tuberculosis, while in 1950 only 73 deaths from tuberculosis were reported. However, in 1952, 191 new cases were reported. These were patients who had developed lesions large enough to be visualized by x-ray or were eliminating tubercle bacilli. This emphasizes the importance of adequate follow-up and careful supervision of every case found.

Doctor James J. Waring, President of the Colorado Foundation for Research in Tuberculosis, has said that the best case finding program in his opinion includes x-ray of the chest on admission of every patient admitted to every general hospital, whether private, municipal, state, or federal, and periodic x-rays thereafter. He emphasizes the importance of x-ray on admission and not on discharge from the hospital, because one of the greatest sources of contagion is the unrecognized case of tuberculosis on the medical or surgical ward of the hospital.

He is also in favor of routine tuberculin testing on every patient being admitted to a general hospital, unless it is well established that the patient on a previous visit had a positive tuberculin test. He also thinks that all old and new personnel of a general hospital staff should have periodic repeats of tuberculin tests and chest x-rays of those who are positive on employment, and repeated chest x-rays of those who convert from negative to positive. He emphasizes the importance of tuberculin testing of nurses and medical students, and repeated chest x-rays of those who convert from negative to positive. He believes that recent converters require careful follow-up with chest x-rays, since the first two or three years after conversion of the tuberculin test from negative to positive are hazardous years so far as the development of active tuberculosis is concerned.

Dr. Waring also strongly urges that every school teacher before employment have a tuberculin test, and if the test is positive, a prompt chest x-ray. He also favors tuberculin testing of school children and chest x-rays of all positives. Those children who show a positive test should be reported to state or city health departments, or a private physician, who should investigate the family and all possible contacts to determine where the child contacted the infection.

An editorial in the August issue of the Texas State Journal of Medicine discusses Tuberculosis Control in Colleges. The report of a subcommittee of Student Health suggested minimum standards for tuberculosis control in colleges. The members of the subcommittee agree that the tuberculin test, being highly sensitive and relatively inexpensive, is the method of choice for surveying students in colleges and universities. The subcommittee believes that a tuberculin test once a year is sufficient for all students whose tuberculin test is negative, and that all stu-

dents whose tuberculin test is positive should receive a chest x-ray at least once a year throughout their college career. Those students whose tuberculin test converts from negative to positive should have a chest rontgenogram every six months. A preemployment chest x-ray of faculty members and other adult employees on the campus should be required.

Aside from the health angle and the mental anguish of those directly affected, tuber-culosis control and case finding is of definite importance to all of us as taxpayers. As a matter of economics it has been estimated that each case of tuberculosis costs approximately \$15,000.00. This amount includes cost of medical and nursing care, health education, case finding, rehabilitation, loss of patient's

wages, compensation, pensions and relief payments to the patient's family while he is incapacitated, and not including the loss of the patient's income if he is a wage-earner.

Some day a thorough program of tuberculosis control will be carried out by the family doctor, and he will be responsible for giving the tuberculin test, and if necessary following up with chest x-rays. But until that day arrives this Texas subcommittee on Student Health feels that the problem of tuberculosis control in colleges is the responsibility of the colleges with the whole-hearted support of local physicians. We believe that a program of tuberculosis control and case finding in South Dakota schools and colleges would be well worth while.

THE MONTH IN WASHINGTON

When the 84th Congress convenes in January, the Eisenhower Administration will press for passage of at least two bills that failed to get through last session, reinsurance and a new program of medical care for military dependents. The former was decisively defeated in the House. The latter did not reach a vote in either chamber.

In a radio address summing up his Administration's legislative achievements, Mr. Eisenhower confirmed that he was prepared to renew the fight next session to have the federal government set up a system for reinsuring health insurance programs. He declared: "Health reinsurance we are going to put before Congress again because we must have a means open to every American family so that they can insure themselves cheaply against the possibility of catastrophe in the medical line."

There have been no indications how far the Administration would go in amending the reinsurance bill to satisfy its critics. It is possible also that if all objectionable features were removed there would be little left of the bill.

At Senate and House hearings, reinsurance was roundly denounced by most witnesses, for a variety of reasons. AMA's position was that reinsurance wasn't needed because private funds are available for the limited

amount of reinsurance that could be used, and that in addition the program projected the federal government too far in the direction of control of medical care.

Later in the session, Mr. Eisenhower himself and Mrs. Hobby made every effort to win over critics of reinsurance, and to force the bill through Congress. In the light of these efforts — including a nationwide radio appeal by Mrs. Hobby — the defeat of the bill in the House of Representatives was regarded as one of the most surprising suffered by the Administration on any domestic legislation.

Currently Secretary Hobby and Chairman Charles Wolverton of the House Interstate and Foreign Commerce Committee are attempting to bring together all parties interested in health legislation to see if a compromise can be worked out on reinsurance.

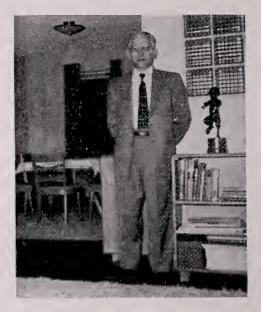
Although the dependent medical care bill wasn't passed, this fact was not in any way regarded as a defeat for Mr. Eisenhower. The bill was offered in the Senate in plenty of time for action, but the introduction of the House bill was held up until Defense Department could estimate the first year's cost, eventually set at \$67 million. At any rate, neither Senate nor House Armed Services Committee held hearings on the measure.

In another statement, Mr. Eisenhower made it clear that he expects the next Congress to do something about improving and making more uniform the system of medical care for servicemen's families. Congress, he said, "must eventually meet certain imperative needs of the members of the armed forces." He explained that servicemen now "lack adequate medical care for dependents . . . It is most important that these needs of the armed forces personnel serving their country often in remote corners of the world engage our serious consideration."

Although the American Medical Association has not had an opportunity to testify on the dependent care plan before Congressional committees, it has made its views known to the Defense Department. In general the AMA is not opposed to Defense Department proposals that a more uniform system be worked out, and that the federal government bear most of the cost. On one important point, however, the recommendations of the department and of the Association are in direct conflict: The department would have the military medical departments themselves furnish dependent medical care wherever they could, with service families going to private physicians and private hospitals only where the uniformed physicians couldn't handle them. The Association, on the other hand, proposes that dependents be cared for by the military medical departments only where civilian medical facilities are inadequate to furnish proper care.

Federal officials, meanwhile, are busy preparing to put into effect the new health bills passed by Congress. Basic state allotment percentages have been worked out for the new Hill-Burton program (for facilities other than complete hospitals) and for the expanded vocational rehabilitation program. The Internal Revenue is about to issue detailed instructions to taxpayers regarding changes in medical expense deductions and other benefits in the new tax law.

MAXWELL LIEBERT, M.D. 1905—1954



Dr. M. Liebert was born in Berlin, Germany 1905. He graduated from the University of Berlin 1920 and after 7 years of training he settled in Berlin as a surgeon and urologist. When Hitler came to power he flew to Palestine and worked as a physician for 15 years in Tel-Aviv. He immigrated to the U.S.A. 1948, took one year of internship at the Sioux Valley Hospital in Sioux Falls and passed the Basic Science and the State Board Examinations. He was licensed as an M.D. of South Dakota. From June 1951 — September 1954 he was a Staff physician at the State Hospital in Yankton. Just a few months ago Dr. Liebert got his American Citizenship.

COUNCIL MEETING Marvin Hughitt Hotel, Huron, South Dakota September 19, 1954

Chairman Dr. Morrissey called the meeting of the Council to order at 1:30 p.m., Executive Secretary Foster called the roll. Those present were: McCarthy, Stoltz, Davidson, Morrissey, Skogmo, McDonald, Reding, Lampert, Pfister, Brown, Spiry, Gillis, Peeke, Cottam, Buchanan, Mayer, Foster.

Dr. Gillis moved to dispense with the reading of the minutes of the last meeting since they had been published previously. Motion seconded by Dr. Stoltz and carried.

Chairman Morrissey called for old business. It was moved by Dr. Davidson and seconded by Dr. Peeke that the A.A.P.S. Essay Contest be set up the same way as last year. Motion carried.

Dr. Stoltz moved that the Insurance Committee be authorized to set up an advertising program on voluntary health insurance. Seconded by Dr. Skogmo and carried.

Dr. Davidson moved that the Council direct the Insurance Committee and the Executive Office to develop a Blue Shield Plan for the House of Delegates to discuss at their next regular or special meeting. Seconded by Dr. McCarthy and carried.

Dr. Brown discussed the State Health Laboratory situation. Dr. Hard commented on the University's opinion of this action and introduced Drs. Cox and Michael of the University staff. Moved the adoption of the Legislative Research Committee's recommendations which follow:

STATE HEALTH LABORATORY

(96) The Committee recommends that the statutory designation of the Bacteriological Laboratory of the College of Medicine at the University of South Dakota as the State Health Laboratory be implemented by proper and adequate appropriations; work in the division of laboratories, State Department of Health be confined to routine testing activities; and the building housing the division of laboratories be considered for additional uses.

The South Dakota Law, first enacted in 1909 (SDC 15.1105), provides that the Bactériological Laboratory of the College of

Medicine at the University shall serve as the State Health Laboratory. In 1951 no appropriation was made for the State Health Laboratory at the University, though an appropriation was made for the first time to the State Department of Health for a new item — the Division of Laboratories.

The Attorney General has ruled (AGR 1951-52, p. 42) that the State Health Laboratory as a result of this action, while continuing as a state agency, is in "a state of suspension." The Griffenhagen report recommends that a decision be made relative to the status of the State Health Laboratory at the University.

Biennial appropriations for the operations of the State Health Laboratory and the Division of Laboratories for the years since 1945 are as follows:

	State Health Laboratory	Division of Laboratories
1945	\$22,000	
1947	24,000	
1949	27,700	
1951		\$38,266
1953		76,500

The conduct of complex medical and health experiments requires well-trained technical personnel. The early detection of epidemics of serious nature demands prompt and expert identification in order to make possible immediate preventive measures. The University College of Medicine has available a staff of doctors and medical scientists qualified to assume the responsibilities of the State Health Laboratory, and overall direction of which would be the responsibility of the professor of bacteriology and pathology. With the completion of the new medical building, space and facilities are available for this use.

Advanced training for laboratory technicians could be carried out effectively on a full-time or part-time basis at the University College of Medicine, which is the only school in the state offering the doctorate degree in the various aspects of opportunity for a better interchange of information with other departments and staff engaged in advanced medical research. The availability of a large staff of

trained medical scientists would also facilitate consultation and coordination in the field of medical research.

The protection of the health of the citizens of the state is of first importance. A state with a small population, such as South Dakota, cannot afford not to utilize to the fullest extent the limited number of highly trained medical scientists available. The Committee believes that the best interests of public health in South Dakota can be served through re-activation of the State Health Laboratory at the University and recommends that appropriations be made to this effect.

The Committee believes that the State Division of Laboratories in Pierre should be confined to routine testing activities. The vacated space in the new state laboratory building should be considered for conversion to other uses.

Seconded by Dr. McCarthy and carried.

There being no further old business, Dr.

Morrissey called for new business.

Dr. Stoltz moved that the South Dakota State Medical Association present a gift to Miss Helen Sundstrom for her services during the past five years and appropriate \$50.00 for such gift. Selection to be made by the executive secretary. Seconded by Dr. Gillis and carried.

Dr. H. T. Kenney, Watertown, was selected by ballot vote as the General Practitioner of the year.

Dr. Lampert moved that Mr. Goldsmith be instructed to proceed with the committee recommended Coroner's Law. Seconded by Dr. Peeke and carried.

Endorsement of Dr. Guy Van Demark's nomination be the Governors Committee on Employ The Physically Handicapped as outstanding in the field of aid to the handicapped was moved by Dr. Stoltz and seconded by Dr. McDonald and carried.

Dr. Davidson moved that the public rela-

tions proposal of "Your Doctor" magazine be tabled. Dr. Gillis seconded the motion and carried.

Dr. Mayer moved that consideration be given by the committee on By-laws and Constitution to creation of a special membership classification for interns and residents. Seconded by Dr. Stoltz and carried.

Dr. Mayer moved that the AMA's "Guiding Principles of Occupational Medicine" be referred to the Workmen's Compensation Committee. Seconded by Dr. Davidson and carried.

A motion was made by Dr. Lampert to have the President, President-elect, Vice-President, and the Executive Secretary select Doctors to attend the sessions at the Legislative for the coming year. Seconded by Dr. Stoltz and carried.

Dr. Stoltz moved that the Council endorse the Inter-Professional Committee's Recommendations to prohibit advertising on eye glass sales if introduced by the State Optometric Association. Seconded by Dr. Buchanan and carried.

Dr. Pfister moved that the Medical Association endorse legislation placing orthoptists under the direct control and supervision of a Doctor of Medicine or Optometry, if introduced by the Optometric Association. Seconded by Dr. Stoltz and carried.

Dr. McCarthy moved that the Commitment Laws be introduced to the Legislative Research Committee of the Bar Association for writing and action. Seconded by Dr. Gillis and carried.

Dr. McCarthy discussed to the Council what the Retirement Plan Committee for the Executive Secretary had done. They were instructed to study this plan until the next meeting in January.

There being no further business, the meeting adjourned at 4:15 p. m.

REPORT OF DELEGATE TO THE AMERICAN MEDICAL ASSOCIATION ANNUAL MEETING

The 103rd annual meeting of the A.M.A. was held on June 21-25, 1954, in San Francisco, California. Your delegate and alternate delegate, Dr. A. A. Lampert, were both present throughout the entire session. Both arrived on June 19th, the Saturday preceding the meeting, to attend special committee and other meetings prior to the opening of the session. The attendance at this annual session was in the neighborhood of 35,000 and more than 12,000 physicians were represented.

At the opening session A.M.A. president, Dr. Edward J. McCormick of Toledo, Ohio gave a very thought-provoking address in which he proposed that the medical profession take the public into its confidence regarding fees and medical costs by adopting and publicizing average fee schedules on an area or regional basis. Dr. Walter Martin, president elect, also addressed the House of Delegates at this session.

Dr. William Wayne Babcock of Philadelphia was elected by the House of Delegates to receive the 1954 Distinguished Service Award of the A.M.A. for his outstanding contributions to medicine and humanity. Dr. Babcock has been professor of surgery and clinical surgery at Temple University School of Medicine.

At the closing session election of officers was held, with the following results:

- Dr. Elmer Hess, Erie, Pa., Presidentelect
- Dr. Clark Bailey, Harlan, Ky., --- Vice-President
- Dr. David B. Allman, Atlantic City, Board of Trustees
- Dr. F. J. L. Blasingame, Wharton, Texas,
 Board of Trustees
- Dr. George F. Lull, Chicago, Secretary
- Dr. J. J. Moore, Chicago, Treasurer
- Dr. James R. Reuling, Bayside, N. Y., Speaker of House of Delegates
- Dr. Vincent Askey, Los Angeles, Vicespeaker
- Dr. J. Morrison Hutcheson, Richmond, Va., — Judicial Council Member
- Dr. Andrew Bunten, Cheyenne, Wyo., Council on Medical Education and

Hospitals

- Dr. Charles T. Stone, Sr., Galveston, Texas, — Council on Medical Education and Hospitals
- Dr. Floyd S. Winslow, Rochester, N. Y.,— Council on Constitution and By-Laws
- Dr. Joseph D. McCarthy, Omaha, Neb.,— Council on Medical Service
- Dr. Robert L. Novy, Detroit, Mich., Council on Medical Service

The next clinical session will be held at Miami, Fla., and the next annual session will be held at Atlantic City in 1955.

The House of Delegates had a very full business schedule from Monday through Thursday. This included one full day devoted to reference committee hearings. Space does not permit an enumeration of the various items considered in the reports and resolutions presented. Only a word or two can be given in this report on even the most important matters under consideration at this meeting.

The osteopathic problem was discussed and the House decided to continue consideration of this problem until December, 1954, permitting time to evaluate education in schools of osteopathy, provided the American Osteopathic Association desires such evaluation.

Veteran's medical care was again the subject of much consideration. The policy on non-service-connected disabilities established at the 1953 annual meeting was reaffirmed.

Methods of evaluating foreign medical graduates received consideration. A study of this problem by the Council on Medical Education and Hospitals was requested with a report at the 1954 clinical session.

Fee splitting and Joint billing of patients was again considered, but no change in attitude or policy resulted. The House of Delegates resolved that it firmly opposes fee splitting, rebating or payment of commissions in any guise whatsoever, and that it further opposes any mechanism that encourages this practice.

(Continued on Page 370)

1954 REVIEW OF MEMBERSHIP

POTENTIAL		TT	4
Licensed Doctors in State	509	Honorary	4
Out-of-State Possibilities	13	Total	28
Non-Licensed Residents	13 8	Total	20
	0 1	MITCHELL DISTRICT # 6	
Deceased-Membership pd.	1	Paid members	31
Total Detautial	E01	Honorary	4
Total Potential	531	Delinquent	3
MEMBERSHIP ON SEPTEMBER 24			-
Licensed Doctors in State	462	Total	38
Out-of-State Possibilities	13		
Non-Licensed Residents	8	SIOUX FALLS DISTRICT # 7	
Deceased-Membership pd.	1	Paid members	97
1 1		Honorary	5
Total Membership	484	Military	4
•		Delinquent	6
BREAKDOWN OF NON-MEMBERS		-	
New in State and Eligible	14	Total	112
Residents — No provision	6		
Obstinate or Ineligible	2 8	YANKTON DISTRICT # 8	
		Paid members	38
Total Non-Members	48	Honorary	3
MEMBERSHIP BY DISTRICTS		Military	1
		Delinquent	2
ABERDEEN DISTRICT # 3			
Paid members	39	Total	44
Honorary	5		
Military	1	BLACK HILLS DISTRICT # 9	
Delinquent	1	Paid members	83
	_	Honorary	10
Total	46	Military	_ 3
WATERTOWN DISTRICT # 2		Delinquent	6
Paid members	25		
			102
Honorary	4	DOCEDID DISTRICT # 10	
Military	1	ROSEBUD DISTRICT # 10 Paid members	8
Delinquent	1	Paid members	o
m	0.1	m . 1	
Total	31	Total	8
BROOKINGS-MADISON DISTRICT	# 3	NORTHWEST DISTRICT # 11	
Paid members	23	Paid members	12
		Honorary	1
Total	23	Military	1
		Willitary	
PIERRE DISTRICT # 4		Total	14
Paid members	21	Ittal	1.1
Honorary	1	WHETSTONE VALLEY DISTRIC	'T # 12
Military	1	Paid members	9
Delinquent	1	Honorary	2
	—	Delinquent	3
Total	24	Demiquent	
HURON DISTRICT # 5		Total	14
Paid members	24	GRAND TOTAL	484
I alu illellibels	41	CILLIII I CILL	101

MEDICAL LIBRARY BOOKSHELF

GOVERNMENT PUBLICATIONS

The government publishes a great many documents that are of interest to the medical profession and which could be more widely read. From the vast number of reports and publications of various departments and committees the following have been selected for reviewing:

The Presidents Commission on the Health Needs of the Nation

This commission was established in 1951 and was authorized to inquire into and study such problems, as the need for physicians, dentists, nurses and allied professional workers to meet the health needs of the nation; the degree to which existing and planned medical facilities such as hospitals and clinics meet present and prospective needs; current research programs; adequacy of methods of financing medical care. The chairman of this commission was Dr. Paul B. Magnuson, Professor emeritus of Northwestern University Medical School. Many other prominent doctors were members.

The findings of the commission are included in 5 volumes which may be purchased from the Supt. of Documents, U. S. Govt. Printing Office, Washington 25, D. C. The lst volume presents information on the origin, purposes, method of operation and guiding principles of the commission. Volume 2 using many graphs and tables presents data regarding the nursing profession, estimates of physicians, graduate nurses, and dentists needed until 1960; construction of hospitals under the Hill-Burton program; role of the general physician; financing personal health services; and problems of the aging population. Volume 3 is a statistical appendix on health personnel and facilities and on utilization of health services. Volume 4 deals with financing of a health program for America. Many charts and tables give expenditures for health by families and by government; expenditures for research; for public assistance; for industrial

health; evaluations of medical care plans such as the Blue Cross and Blue Shield. **Volume 5** presents panel discussions on financing a health program.

Public Health Reports

The recently created U.S. Department of Health, Education and Welfare publishes this journal. Altho published primarily for directors and supervisors of public health programs and for institutions training public health personnel there are many articles that would be of interest to the physician and others interested in the public health field. The May 1954 issue contains an article by Leonard A. Scheele, Surgeon General of the Public Health Service entitled "Better Care for Older People" Quoting from this article "Joint planning is the first step toward overcoming . . . difficulties. The health and welfare agencies, both official and voluntary, as well as private and public institutions providing nursing care could obtain much valuable advice and practical assistance if they would more frequently bring their state and local medical societies in on the ground floor of such planning. The active participation of the local medical profession is indispensable in the development and operation of any constructive health program for the aging."

Public Health Monographs

Published also by the U. S. Dept. of Health, Education and Welfare, and concurrently with Public Health Reports where they are listed in the table of contents. Single copies are available. Monograph No. 17 is Rehabilitation of Mental Hospital Patients; Review of the Literature by Charlotte Green Schwartz. The analysis of the literature reviewed is organized around the answer to 5 major questions: 1. What is the unit of rehabilitation. 2. What is process of rehabilitation. 3. What personal attitudes toward patients are rehabilitative. 4. What kinds of hospital social structures, that is, institutional arrangements are rehabilitative. 5. How can

minimal

side

effects

LEDERLE LABORATORIES DIVISION AMERICAN Cyanamid COMPAN

One of the notable qualities of ACHROMYCIN, the Lederle brand of Tetracycline, is its advantage of minimal side effects. Furthermore, this true broad-spectrum antibiotic is well-tolerated by all age groups.

In each of its various dosage forms, ACHROMYCIN provides more rapid diffusion for prompt control of infection. In solution, it is more soluble and more stable than certain other antibiotics.

ACHROMYCIN has proved effective against a wide variety of infections caused by gram-positive and gram-negative bacteria, rickettsia, and certain virus-like and protozoan organisms.

ACHROMYCIN ranks with the truly great therapeutic agents.

DMWGIN

HYDROCHLORIDE
Tetracycline HCI Lederle

rl River, New York



gaps between hospital and community be bridged.

Aging

Publication of th U. S. Dept. of Health, Education and Welfare. The Sept. 1954 issue gives a report on the third International Gerontological Congress held in London beginning July 19th, 1954. Also, under the heading "Michigan does it again" the seventh annual University of Michigan Conference on aging is reported.

Dr. Wilma Donahue, who presided at this conference has recently edited a book Housing the Aged published by the University of Michigan Press, which is a report on the fifth Michigan Conference on aging. This summarizes what is known about current and desired living situations for both the well and infirm and sick and discusses financial problems and opportunities and gives some guideposts to community action.

Mrs. Esther Howard Medical Librarian U. S. D.

REPORT OF DELEGATE-

(Continued from Page 365)

The House terminated the Seal of Acceptance program for voluntary health insurance plans. The Council on Medical Service outlined the difficulties encountered in continuing to conduct the Seal of Acceptance program and asked that it be discontinued.

Among the many other matters considered was "closed panel medical care plans," which will be the subject of further study. It was decided also to continue the holding of the annual clinical meeting as heretofore. It should be noted also, that the California Medical Association contributed \$100,000 to the American Medical Education Foundation. It has been impossible to include in this report a great many other matters which received consideration and decision. Each physician is urged to read the full report of the annual meeting.

Respectfully submitted, H. Russell Brown, M.D. Delegate from the South Dakota State Medical Association to the American Medical Association

AMA'S P.R. MEET HELD

The AMA's Public Relations Institute in Chicago September 1 and 2 attracted almost 300 state and county medical society representatives. Attending the "crackerbarrel Institute" from South Dakota was John C. Foster, Executive Secretary, South Dakota State Medical Association, who spoke briefly on his state's public relations program.

The Institute, planned primarily for lay executive and PR personnel, M.D. chairman of PR committees, and Auxiliary PR committee women, was the most successful ever held. The two-day meeting featured experts in medical television production, direct mail promotion, AMA services, medical fees, the role of medical assistants, medical motion pictures, and inter-organizational cooperation.

Because of the large and enthusiastic attendance, almost every problem confronting medical societies was discussed, and the meeting provided many suggestions and approaches to a successful and thorough medical public relations program for each society.

This cooperative spirit at the Institute displayed the united front of nationwide medical public relations, and the reported "success stories" were convincing proof that the programs of medical societies were winning the increased understanding and friendship of the public.

Another meeting, keyed to the public relations needs of individual physicians, will be the AMA's Seventh National Medical Public Relations Conference in Miami at the Mc-Allister hotel, Sunday, November 28 — the day preceding the opening of the Clinical Session. All physicians are invited to participate and to learn how their colleagues have improved medical public relations in their home communities.

CANCER RESEARCH FUND AVAILABLE

The South Dakota Division, American Cancer Society, at its last annual meeting approved a budgetary research item of \$1,000 to be used by South Dakota practitioners for research of a cancer case in their own practice.

For information write:

South Dakota Division American Cancer Society Watertown, South Dakota

HEART ASSOCIATION NOTES

Is the pattern of the United States diet responsible for the fact that this country has the highest death rate from heart attacks and strokes of any people in the world?

Conclusions of Drs. Ruth Pick, Jeremiah Stamler and Louis Katz, Michael Reese Hospital, Chicago, on this matter are:

Regulatory functions are apparently not fully adequate because of the "continuing strain" upon the body due to the usual American diet which is especially rich in fats. Such a diet apparently "triggers" the processes leading to fatty degeneration of the arteries. This applies to the population as a whole and once the trigger is pulled, individual differences come to play in influencing whether the charge is fired.

Fat intake drastically lowered in European countries during World War II has been a factor in reduced death rate from heart conditions.

* * *

"WARFARIN", a drug developed for rodent control is now a benefit to man. First used to kill rats by making them bleed to death internally, Warfarin is proving itself a valuable aid to physicians seeking to prevent blood clots in patients. While the drug's effectiveness against rats is based on its ability to cause fatal hemorrhage, in humans it interferes with clotting, yet has a limited tendency to cause bleeding. A single dose which can be given either by injection or by mouth, remains effective for several days.

* * *

A VEIN GRAFT by surgery to by-pass an area blocked by a clot may restore circulation to the part of the body which has had its blood supply impaired, Dr. Gerald H. Pratt, New York, reports. It has proved feasible to bridge the blocked area by means of a graft without eliminating the damaged part. This method supplements, but does not disturb the collateral circulation which the body itself tends to develop to compensate for the damage caused by the clot.

NEW EVIDENCE that most people with heart disease may safely engage in productive employment, except for extremely heavy labor, and actually feel the better for it, was reported at the recent 27th Scientific Sessions of the American Heart Association.

Report of the work classification clinic of the Cleveland Area Heart Society during the past four years shows that 75 per cent of 535 cardiacs representing all occupational classifications have been returned to gainful employment. A follow-up study has revealed that those who returned to work not only performed safely and productively in a variety of occupations, but among this group improvement in cardiac and occupational status was two to three times more frequent than deterioration.

At the Altro Workshops in the Bronz, New York, "disabled" cardiacs between the ages of 18 and 60 were put on a supervised work schedule that was gradually increased to a full seven-hour work day. A consulting cardiologist observed that it may be estimated that no more than about 30 per cent of those thought to be "disabled" because of heart disease really have a serious heart disease, and that of these, at least half need not be disabled.

* * *

NEW HEART OPERATIONS have made motherhood safe for many women in whom a serious heart disease would have ruled out the possibility of successful pregnancy a few years ago, Dr. Curtis Mendelson, New York, states.

Analyzing the records of 78,527 women who had their babies at the New York Lying-in Hospital from 1932 to 1953, Dr. Mendelson found that heart disease was found in 2,932 cases. There were 29 deaths among these cases or a mortality of one per cent in the group.

Main difficulties usually occur among the relatively small group whose heart valves have been seriously damaged by rheumatic fever, a condition which now lends itself to corrective surgery.

Candidates State Views on Medicine

UNITED STATES SENATE
Washington, D. C.

Madison, South Dakota September 26, 1954

Mr. John C. Foster Executive Secretary South Dakota State Medical Association 300 First National Bank Building Sioux Falls, South Dakota

Dear John:

I am happy to have your good letter of September 23rd, which catches me while I am in the office for a very few minutes between campaign trips around the state.

As you undoubtedly know, I was a strong supporter and co-author of the Bricker Amendment. I still am.

The President's reinsurance plan was debated, discussed and defeated in the House and since it never came before us in the Senate, I must confess I am not conversant with all of its details. From what I do know about it, however, I am not favorably impressed with it and was pleased when it was killed.

Concerning your first question, as to how I stand "about government health insurance provided in the same manner as the present Social Security plan," I simply do not know enough about the details of such a proposal to make a categorical and intelligent reply. By and large, I am against government insurance and government programs of all types which smack of socialism. If a program of government health insurance can be evolved which will in no sense interfere with our concepts of individual initiative and private enterprise, I might look on it with favor but I would want to be sure of these facts before committing myself to support such a proposal. As the members of your State Medical Association, of course, know, I have long been one of the leaders in the fight opposing socialized medicine or any other form of socialism in this country. I shall continue to operate so.

With best wishes and kindest personal regards, I am

Cordially yours,

Karl E. Mundt, U.S.S.

DOYLE, MAHONEY & DUNN

Attorneys-at-Law

National Bank of South Dakota Building

> Sioux Falls, S. D. September 27, 1954

John C. Foster Executive Secretary South Dakota State Medical Association 300 First National Bank Bldg. Sioux Falls, South Dakota

Dear Mr. Foster:

With regard to your letter of September 23, I am sending you my views in regard to the questions asked.

- How do you feel about government health insurance provided in the same manner as the present social security plan? I would be against such a proposal.
- 2. Do you favor the Bricker amendment proposals to limit treaty powers that abrogate certain state's rights? I don't favor the Bricker amendment proposals for the reason that I feel that it ties the Chief Executive's hands in making necessary agreements in this fast moving world. It is my personal opinion that if we were to wait for the House and the Senate to act on each one of these proposals no treaties would ever be executed.
- 3. Do you favor the President's reinsurance plan which was recently killed in the House? I would favor something similiar to the President's reinsurance plan in order to provide health insurance for low-income people. I feel this would be a big boom not only to the health of the country but also to the medical profession as they are not forced to handle much of this work without compensation.

With best personal regards, I remain,

Very truly yours,

Francis G. Dunn

KEN HOLUM

Candidate for UNITED STATES SENATE

Groton, South Dakota

September 30, 1954

Mr. John C. Foster Executive Secretary South Dakota Medical Association 300 First National Bank Building Sioux Falls, South Dakota

Dear Mr. Foster:

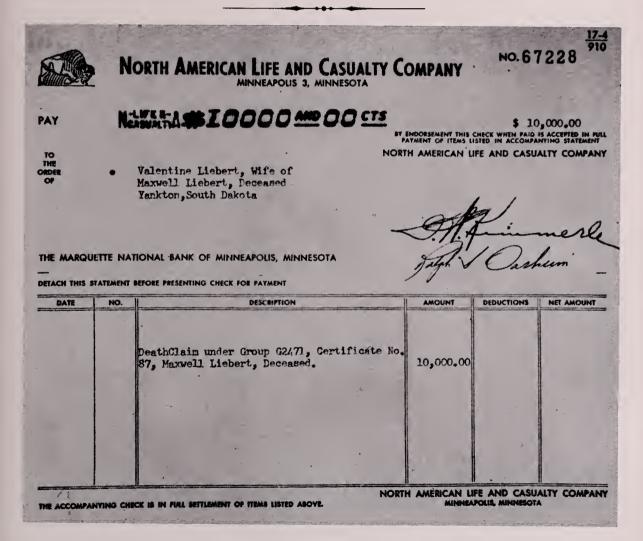
I deeply appreciate your letter of the 23rd and

the opportunity for transmitting to you the information you request regarding my views.

I would very much like and hope to some day sit down with your Board of Directors and discuss the matters contained in your letter. In fact, I would sincerely welcome the opportunity to appear before your entire Medical Association prior to the election and quite extensively go over with the members the issues of the campaign.

Sincerely,

Kenneth Holum



The above is a photostatic copy of a check delivered to the widow of Doctor Maxwell Liebert of Yankton. Dr. Liebert died nine days after the installation of the State Medical Group Life Insurance Plan.

Your membership in the State Medical Association has many benefits. One of them is the opportunity to obtain Group Life Insurance at a minimum cost. Those of you who have not enrolled as of this date should contact your Association Secretary.



This is your

MEDICAL ASSOCIATION

GROUP LIFE PLAN NOW IN EFFECT

The Group Life Insurance Plan of the South Dakota State Medical Association is in effect as of August 26th. Despite a smaller enrollment than anticipated, the North American Life and Casualty Company has started the term plan close to the original estimated premium structure. \$10,000 worth of insurance is available to members under 65 years of age and \$5,000 to those between 65 and 70.

Enrollments are still being taken in the plan which has already paid out \$10,000 in a claim to an individual's wife after only nine days of insurance coverage.

Any member desiring coverage should contact the Association's office in Sioux Falls.

JOURNAL EDITOR APPOINTED TO ADVISORY BOARD

R. G. Mayer, M.D., editor of the South Dakota Journal of Medicine and Pharmacy and past-president of the State Medical Association has been appointed to the advisory board of the State Journal Advertising Bureau. Appointment was made by

the Board of Trustees of the American Medical Association.

The Advisory Board supervises the advertising sales of thirty-three state medical journals and conducts periodic clinics on medical journalism.

The Bureau has offices in Chicago and New York.

SDPHA HEARS DUKELOW, KNOWLES

The South Dakota Public Health Association will hold its annual meeting in Pierre, October 29th and will feature Dr. Donald Dukelow of the American Medical Association's Bureau of Health Education, and the Rev. Rex Knowles, director of the U. of Nebraska's Presbyterian-Congregational Fellowship Center at the University of Nebraska.

Theme of the program will be "School Health" and Dr. Dukelow will keynote the morning sessions. Discussion panels and a summation by Dr. Dukelow will complete the afternoon session.

Rev. Knowles will be featured at the annual banquet that evening. All physicians are urged to attend if at all possible.

ABERDEEN DISTRICT HOLDS MEETING

The Aberdeen District Medical Society held their regular monthly meeting on Wednesday evening, September 1st; with a steak dinner in the Mexican Room of the Sherman Hotel. About 25 members being present. Doctor A. W. Spiry, Mobridge, president of the South Dakota State Medical Association, made his official visitation to the Aberdeen District Society: and various routine business matters were discussed.

GAMMA GLOBULIN AVAILABLE

Gamma Globulin soon will be available directly to physicians and the drug trade. It was announced by Pitman-Moore Company, Indianapolis drug firm and one of the largest of five producers of the material used in the prevention of paralytic polio.

For two years all gamma globulin manufactured has been committed to the National Foundation for Infantile Paralysis for distribution under the direction of the office of Defense Mobilization. Stock piles of the material derived from human blood are now sufficient to

permit the release of the product for general distribution through normal drug channels.

According to H. O. Ball, Executive Vice-President of the company, the office of Defense Mobilization and the National Foundation are expected to release their control of gamma globulin on October 1.

Human gamma globulin which contains antibodies against polio (infantile paralysis) will bear the official name assigned to it by the National Institute of Health—Polio Immune Globulin (Human). However, its effectiveness in the modification of measles and infectious hepatitis has long been recognized and its use in these fields probably will prove as great as in case of polio.

The effectiveness of gamma globulin as a polio preventive, even in those already exposed to the disease, has been reaffirmed by Dr. William MCD, Hammon, one of the first workers in the field, and his associates. Gamma globulin is being used pending the results of the tests being conducted on the bulk vaccine. Pitman-Moore Company also is one of five firms producing the experimental vaccine.

NEWS NOTES

Dr. S. G. Bailey, for many years with the Hot Springs Clinic, is now in Rock Island, Illinois.

The North Central Conference, the medical economics conference of Iowa, Minnesota, North Dakota,

South Dakota, Nebraska and Wisconsin, will be held at the St. Paul Hotel in St. Paul, November 13th and 14th.

Dr. G. H. Steele has reopened his office in Aberdeen after eighteen months of

military service.

The American Medical Education Foundation announced last month that contributions to the fund for the year were nearing the one-million mark. This includes a recent \$100,000.00 contribution from the California Medical Association.

The North Dakota State Medical Association raised its dues to \$75.00 starting January 1st.

Dr. Celia McNeeley, formerly at Drain, Oregon, has announced her intention of practicing at McIntosh, South Dakota.

Dr. Dave Patterson, Winnipeg, has announced that he will be associated with **Dr. Alvin Scheffel** in Redfield.

SEVENTH DISTRICT HEARS BLACK

The Seventh District Medical Society met October 5th at the Cottage in Sioux Falls to hear **Dr. Albert S. Black** of Omaha speak on "Plastic and Reconstructive Surgery."

REHAB FELLOWSHIP OFFERED TO MD'S

The National Foundation for Infantile Paralysis announces the availability of a limited number of clinical fellowships in the fields of physical medicine and rehabilitation. These are offered to physicians who wish to become eligible for certification by the American Board of Physical Medicine and Rehabilitation.

These fellowships are awarded as a part of the National Foundation's program of professional education for which more than \$19,000,000 in March of Dimes funds have been appropriated since 1938.

It is the responsibility of each applicant to arrange his own program of study, which must be planned to meet the requirements of the American Board of Physical Medicine and Rehabilitation. Each recipient of a fellowship must agree to practice as a specialist in physical medicine and rehabilitation in the United States or its territories for at least two years following the completion of his fellowship.

Applicants for fellowships must be physicians licensed to practice medicine in one or more states who have graduated from an approved school of medicine, have completed an internship of not less than one year in an approved hospital, are citizens of the United States (or applicants for citizenship), and are in sound health. Ordinarily applications will not be accepted from candidates over 40 years of age.

OB-GYN BOARD TO EXAMINE

The next scheduled examination (Part I), written examination and review of case histories, for all candidates for the American Board of Obstetrics & Gynecology will be held in various cities of the United States, Canada, and military centers outside the continental United States, on Friday, February 4, 1955.

Case Abstracts numbering 20 are to be sent by the candidate to the Secretary as soon as possible after receiving notification of eligibility to the Part I written examination.

Candidates are reminded at this time that lists of hospital admissions must accompany new applications and requests for reopening. Information is available from

Robert L. Faulkner, M.D. 2105 Adelbert Rd. Cleveland, 6, Ohio.

NOVEMBER 11th CARDIAC COURSE SET FOR DENVER

The Third Annual Western Cardiac Conference, sponsored by the Colorado Heart Association, Colorado State Department of Public Health, Fitzsimons Army Hospital, Denver Veterans Administration Hospital and the University of Colorado School of Medicine, will be held in Denver, November 8-13, 1954, and is expected to attract about 400 physicians.

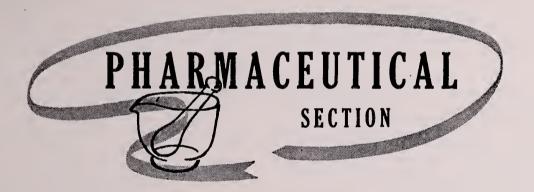
This combined conference on "Clinical Electrocardiography and Recent Advances in Cardiovascular Diseases" will be an outstanding medical event for physicians in Western United States.



Executive-Secretary Foster hands out literature to attractive Mona Drew of Gettysburg, South Dakota at the Medical Association's exhibit at the State Fair.



Unposed picture shows interest of Fair-goers at Medical Association's exhibit on Food Facts and Fallacies.



HAROLD S. BAILEY, PH.D.
EDITOR
Division of Pharmacy
College Station, South Dakota

PHARMACEUTICAL

ANIMAL HEALTH PHARMACY* Part III Kenneth Redman, Ph.D.**

Ways in Which Insects Are Useful to Man

Although insect injury to plants and animals justly receives a large share of our attention, their benefits to man should not be overlooked. Too many of us are likely to think of all insects as "Villains," but quite the contrary, many insects are useful in a variety of ways. We would be doing them, as well as ourselves, an injustice to not recognize some of the contributions of insects to man's welfare

Insects produce or collect many useful products: wax and honey by bees, shellac by lac insects, carminic acid (a purple coloring principle) by cochineal insects, cantharin (a blistering agent) by cantharides, and nutgall produced on certain oaks by the puncture of a female fly are examples commonly known to pharmacists. In this category, too, is formic acid, which may be obtained from red ants.

The increased value of such farm crops as alfalfa and sweet clover caused by the pollination of the flowers by bees is well recognized by farmers, apiarists, and others. The smyrna fig was a failure in the United States until the introduction of a small wasp in 1900 to pollinate the flowers.

Grasshoppers and some other insects serve as food for poultry and other land birds and fish, while ant eggs are commercially available as a pet food. The consumption of "locusts" by humans in some parts of the World, as well as other insects and insect eggs, raw, roasted, and dried, has continued since Biblical times.

Insect Parasitism Valuable

Insects are useful in keeping a balance in nature, too, as parasites and predators on each other. There are many kinds of parasitism among insects, too numerous to mention here, but the caterpillar of the gypsy moth may be mentioned as an example of a host for the larva of a parasitic wasp (Apanteles fulvipes Haliday). Insect predators are probably better known to the layman and include aphid-lions (the young of lace-wing flies) and ladybugs. The adults and larvae of these insects eat scale insects, aphids, etc.

Insects are useful, too, in the destruction of various weeds (as they do other plants). Flea beetles destroy the Solanums as avidly as they do potatoes, for example. Insects increase the fertility of the soil by burrowing and by fertilizing it with their bodies, excreta, and organic matter that they bring beneath the surface. The writer has found a handful of selected seeds deposited three feet or more beneath the surface of the ground, presumably by ants. Insects act as scavengers, the larvae of many flies and beetles, especially, aid in the destruction and conversion of dead plants and animals into plant food.

The relatively short life cycle of insects, as compared to man and some other animals, as well as other characteristics, often makes them desirable for research purposes. An example of the value of insects in science is the classical use of a fruit fly in the study of genetics. There are many other ways in which insects are useful to man, such as the aesthetic value of butterflies, 1 but suffice it to say here that it behooves us all to know and recognize the more common insects beneficial to man so that we may not only appreciate them, but that we may encourage their growth also.

¹For a more complete treatise on insects useful to man, see Metcalf, C. L., W. P. Flint, and R. L. Metcalf, "Destructive and Useful Insects," Mc-Graw-Hill, 1951.

^{*}The third of a series of articles concerning the role of the pharmacist in the field of animal health.

^{**}Professor and Head of the Department of Pharmacognosy, Division of Pharmacy, South Dakota State College.

Pharmaceutical

Economics

TRENDS IN PHARMACEUTICAL EDUCATION*

G. C. Gross, Ph.D.**

Mr. President, members of the South Dakota State Pharmaceutical Association:

The year 1954 finds the profession of pharmacy confronted with many problems and we, as members of the profession interested in its progress and welfare, have reason to feel concern; but I am sure that we shall meet these challenges with confidence and out of this will emerge a stronger and greater pharmacy.

I should like to call your attention to some of the problems that are confronting us in the field of pharmaceutical education and acquaint you with the trends that are taking place in that field. These are matters which are of concern to all of us whether we are in the retail field, industry or teaching, or any of the other branches of the profession; for education is the foundation of our profession and those matters which affect it affect all of us.

The first half of the twentieth century was a period of rapid development in the American educational system and pharmaceutical education was no exception. Not only were there great increases in the numbers of colleges of pharmacy and in total enrollment but what is more important there were great advancements in the quality of instruction and the standards of professional education. Out of what was almost a chaotic situation at the turn of the century, there emerged a profession with rigid standards and high principles and one which enjoys a respected place

*Presented to the South Dakota State Pharmaceutical Association Convention, Aberdeen, 1954.

**Professor of Pharmacology, Division of Pharmacy, South Dakota State College.

among the members of the health team. We can look with pride to accomplishments of this period and with gratitude to the alert and far sighted individuals who were responsible for its progress. While tribute can be made to many, it would be amiss for me not to single out the work of the American Foundation for Pharmaceutical Education, an organization which had its inception in 1942 and in the brief span of a little more than a decade has done more, I believe, for the improvement of professional education than any similar body, pharmaceutical or otherwise. Completely dedicated as it is to the promotion of pharmaceutical education, we in the profession should indeed be proud of this organization.

Year of Decision

This year, 1954, is a year of decision in pharmaceutical education and may well take its place in significance with 1925 when the 3 year program of training was adopted by the colleges and 1932 when the 4 year curriculum superceded the three. For this year, member colleges (members of the American Association of Colleges of Pharmacy) will act upon a proposal to extend the collegiate program to five years. The agitation for an extended curriculum has been going on for many years. As long ago as 1937, a joint committee representing the American Association of Colleges of Pharmacy and the National Association of Boards of Pharmacy recommended that colleges of pharmacy be permitted and urged to offer curricula of five or more years, but the majority of deans at this time were opposed and no action was taken. The Committee on the Pharmaceutical

Survey, in 1948, recommended that the colleges take the initial steps for the establishment of a six year program leading to the degree of Dr. of Pharmacy (Phar.D.). In 1951, a proposal for extending the collegiate program beyond four years was rejected by the colleges. Even so, there are at present some 13 schools that have programs of more than four years. Five of these have optional five year curricula while eight schools have mandatory programs ranging from somewhat in excess of four years to six years in duration. It seems a fairly safe bet that the American Association of Colleges of Pharmacy, meeting in August, will approve a proposal for a five year course. Specifically, the proposal that will come before the colleges would make mandatory such a program on and after April 1, 1965 and it further provides that this shall include a minimum of three years of professional instruction. The National Association of Boards of Pharmacy in 1953 expressed favor toward the adoption of the five year curriculum but set the date for its implementation at July 1, 1957. Perhaps a compromise will be reached as to the effective date.

Existing Curricula Criticized

I should like to consider some of the factors that have been responsible for these developments. Within the last decade a great deal of dissatisfaction has been expressed with existing curricula in colleges of pharmacy. Much of this has come from the educators in pharmacy but in addition, there has been criticism from other segments of the field as well as from sources outside of the profession. This dissatisfaction and criticism is a healthy thing; it prevents the complacency which otherwise might exist and it is a stimulus for progress. But what are some of these major cricicisms?

First of all, our curricula are too professionalized. That is, we do not place enough emphasis on those subjects which are not, strictly speaking, professional subjects. We fail to give due consideration to the general education of the student because we find ourselves too deeply engrossed in the professional aspects of his training. Our product, then, although he may be professionally prepared, has had inadequate training for his role as a responsible leader in the community. Our laxity in this respect is pointed out as a failure in developing truly educated people who are characterized by broad educations and

diversfied interests.

Secondly, and this is a criticism that arises particularly from the retail field, our curricula do not devote enough attention to the business aspect of the student's training. Emphasis is placed on the development of technical skills and professional knowledge with very little time being devoted to business training. It certainly can be argued that the retail practice of pharmacy requires sound training in both and because most of our graduates go into the retail field, it is our obligation, as educators, to provide them with this training.

In addition to these, we must provide the student with adequate instruction in the basic sciences — physics, chemistry and mathematics — as well as in the professional subjects which are increasing in scope by leaps and bounds.

The educator, faced with the organization of a four year curriculum, it apt to find himself in a dilemma. On the one hand, he is faced with the problem of preparing a curriculum which should provide adequate training in the several areas which we have just enumerated, while on the other hand, he must keep the student course-load within reasonable limits. Obviously, with a curriculum of limited duration, something will have to be sacrificed; we just cannot meet all of these requirements. The tendency is, of course, to make the sacrifices in the areas of general education and business training.

We at State College have been confronted with the difficulties associated with the four year curriculum and I can assure you that it is not an easy matter to work out a satisfactory program. In 1950, our accrediting agency, The American Council for Pharmaceutical Education, criticized our curriculum for being deficient in basic sciences and in pharmacy administration. These were corrected in a subsequent revision of the program but only by increasing the student load. This program called for required courses, exclusive of electives, totaling 206 quarter hours. The college requirement for graduation including required courses plus electives is only 204. Also unfortunate was the fact that the particularly heavy loads occurred in the freshman and sophomore years, when actually these, particularly the freshman load, should be fairly light. This is not as easily corrected as one

might suppose. Courses cannot be juggled around at random because of the necessity for proper sequence and the need for conforming to proper college procedures and requirements. This curriculum has since been revised and the new one will go into effect this Fall. Through the elimination of some courses, such as Pharmaceutical Latin, and by reducing credit on others, we were able to bring the total credit of required courses down to 196. This allows for a minimum of 8 elective credits to meet the college requirement of 204 for graduation. That is not very much. We were gratified, however, that the inspection team of the American Council on Pharmaceutical Education saw fit to refer to this curriculum as "about as effective as can be developed within the time of four academic years as far as courses and sequence are concerned."

Three Year Professional Minimum

With respect to extended programs of instruction various schools of thought exist as to how the time should be divided between preprofessional training and the professional work. The proposal that will come before the colleges this August provides for a minimum of three years of professional instruction. Thus, two years could be devoted to preprofessional training i.e., general education and basic science instruction. There are those who would advocate that the division be made on

a one-four basis, and I am inclined to favor this view. This plan does not necessarily mean that the four years would be devoted exclusively to professional subjects but would include instruction in the extra-professional areas as well. It would, of course, permit the colleges of pharmacy to have greater supervision over the instruction given to their students than would a 2-3 program, and that is, I think, as it should be.

In any event, it seems almost certain that an extension of the four year program will come about. Right now, this has the backing of the American Pharmaceutical Association, the National Association of Boards of Pharmacy and the American College of Apothecaries and it remains for the American Association of Colleges of Pharmacy to take action. I wish that I might be able to prophesy what effect this will have on college enrollments and the supply of pharmacists, but, unfortunately, that I cannot do. Howver, I think that experience will show that raising educational requirements does not discourage enrollment but rather, encourages it. In our own profession, we have progressively elevated the level of education and it has been to our benefit. There is no doubt in my mind that this move will contribute much to the prestige of pharmacy and all pharmacists and will increase stature as a member of the health team.

A. C. A. ELECTS NEW OFFICERS

At their Thirteenth Annual Convention in Boston, the Fellows of the American College of Apothecaries elected the following officers for the year 1954-1955:

President—Louis J. Fischl, Oakland, California President-Elect—Mearl Pritchard, Buffalo, New York Vice-President—Leroy Weidle, Jr., St. Louis, Missouri Secretary—Robert E. Abrams, Philadelphia, Pennsylvania Treasurer—Charles V. Selby, Clarksburg, West Virginia Regional Directors:

Calvin Berger, New York City, New York Henry Gregg, Minneapolis, Minnesota Robert L. Geiger, San Francisco, California Gerald Nutter, Bartlesville, Oklahoma



CHLOROMYCETIN-HYDROCORTISONE OPHTHALMIC

Description: A combination of the antibiotic chloromycetin, 12.5 mg. and the hormone hydrocortisone acetate, 25 mg., in a borate buffer solution preserved with Phemerol chloride.

Action and Indications: For topical use in ocular infections. The hydrocortisone acetate acts to suppress fibroblastic proliferation of tissue. In ocular infections when scarring is not anticipated, chloromycetin is of value in eradicating bacteria with the hydrocortisone controlling inflammatory response and making the patient more comfortable.

When the patient's vision is threatened by involvement of the anterior segment, hydrocortisone can block inflammation immediately, suppress fibroblastic proliferation and lessen pain and photophobia, chloromycetin being of prophylactic use in this case.

In other cases the two drugs may be needed to exert equal effect as in traumatic lesions of the eye, post operative treatment of glaucoma and in chemical or thermal ocular burns.

Dosage: First 24-48 hours — 2 drops to the affected eye every one to three hours, night and day.

After 24-48 hours — 2 drops every three to four hours during the day, night instillations being omitted if desired. Continue until the eye has appeared normal for 48 hours.

How Supplied: The new product is supplied in dry form, each 5-cc. vial containing 12.5 mg. Chloromycetin, 25 mg. hydrocortisone ace-

tate, and borate buffer equivalent to 100 mg. boric acid, with Phemerol chloride (benethonium chloride, Parke-Davis) present so the suspension after preparation will contain 1:10,000 as preservative in individual packages with separate dropper cap.

The dry material is stable at room temperature for two years, while the prepared suspension may be kept at room temperature for 10 days without loss of potency.

Chloromycetin-Hydrocortisone Ophthalmic is prepared for use by adding five cc. sterile distilled water to contents of the vial under aseptic conditions and shaking to make a uniform suspension.

Source: Parke-Davis and Co., Detroit, Michigan.

INTRIBEX KAPSEALS

Description: A combination vitamin-blood building product for anemia. Each Kapseal has intrinsic factor concentrate containing 7.5 mcg. vitamin B-12, ½ U.S.P. oral unit, to which has been added 200 mg. of liver-stomach concentrate, 7.5 mcg. of crystalline vitamin B-12, 1 mg. of folic acid, 375 mg. exsiccated ferrous sulfate, and 75 mg. of ascorbic acid.

Indications: For patients with uncomplicated pernicious anemia or other types of megaloblastic anemia.

Dosage: Two Kapseals each morning, or one morning and night. For patients with a hypochromic anemia or a severe nutritional anemia, the dosage should be increased to three or four Kapsals of Intribex daily.

How Supplied: Available in bottles of 100 and 500

Source: Parke-Davis and Company.

EXPASMUS

Description: Expasmus is a new combination of antispasmodics, plus a powerful analgesic, in a single prescription form. Each tablet contains dibenzyl succinate 125 mg., mephenesin 250 mg., and salicylamide 100

Action and Indications: Expasmus relaxes both skeletal muscle and associated smooth muscle spasm, relieves low back and arthritic pains, and acts as a mild nonbarbituate sedative and relaxant in tension. Dibenzyl succinate, useful in reducing muscle spasm, can safely be given in large doses. Mephenesin is included as a non-habit forming relaxant of skeletal muscle and mental tension. It is completely metabolized in the liver and does not accumulate in toxic quantities. Salicylamide, more powerful than aspirin, provides swifter relief of pain than spasmolytic drugs alone.

Dosage: Average dose, two tablets every four hours. Maximum daily dose, twelve tablets. Available: 100 tablets to a bottle, with MHS

impressed on each tablet.

Source: Martin H. Smith Co., New York 13, N. Y.

INFUSION CONCENTRATE 'HYDROCORTONE'

Description: Infusion Concentrate 'Hydrocortone' is an emergency preparation essential in a number of grave medical emergencies where rapid effect is needed.

Indications: Investigational studies credit this new development in adrenocortical steroid therapy with dramatically effective or even life-saving action in cases involving surgical shock, transfusion reactions, severe drug reactions, status asthmaticus, acute allergic emergencies, Addisonian Crisis, Waterhouse-Friedrichsen Syndrome, Disseminated Lupus Erythematosus, partial or bilateral adrenalectomy and hepatic cirrhosis.

Dosage: Infusion Concentrate 'Hydrocortone' must be diluted aseptically with at least 500 cc. of physiologic saline or dextrose solutions before administration. Dosage is determined by the rate of flow of the diluted infusion solution, calculated by assuming 20 drops equal to 1 cc.

How Supplied: Infusion Concentrate 'Hydrocortone' is supplied in 20 cc. ampuls containing 100 mg. of 'Hydrocortone.'

Source: Sharp and Dohme, Division of Merck and Co.. Inc.

HYDROCORTONE LOTION

Description: A topical lotion of hydrocortisone 1% contained in a plastic "squeezetype" bottle.

Indications: For topical therapy of various dermatoses responding to hydrocortisone treatment.

This form of 'Hydrocortone' for topical use resulted from research and clinical studies directed toward developing a dosage form more cosmetically acceptable. simpler to apply, more effective because of its spreading qualities, and more advantageous when large areas are involved. A further factor was ease of application to various dermatoses of the hairy areas.

Clinical investigations, according Sharp and Dohme, indicate that the lotion does not burn or sting when applied; does not stain skin, clothing or other objects; has no disagreeable odor; and is not uncomfortable or unsightly when rubbed in well. There were no instances of allergic sensitization even after prolonged use, and no evidence of absorption with resulting systemic effects.

How Supplied: In 15 cc. plastic bottles.

Source: Sharp and Dohme, Division of Merck and Co., Philadelphia.

BROXOLIN VAGINAL TABLETS

Description: Tablets containing bismuth glycolylarsanilate in an approximate concentration of 15% arsenic and 45% bismuth.

Indications: Treatment of bacterial or parasitic infections of the vagina. Claimed to be virtually specific therapy against vaginal trichomoniasis and moniliasis.

Dosage: One tablet is administered morning and night, with a ten-day course of treatment generally being sufficient to provide relief from such symptoms as burning, itching, discharge and unpleasant odors.

How Supplied: Bottles of 20 and 100 tablets. Source: George A. Breon and Co., New York City.

ALEVAIRE

Description: A smaller size bottle (60 cc.) of a mucolytic detergent aerosol designed especially for use in the home. Previously the product was offered only in a 500 cc. packing.

Indications: Administered through a nebulizer as a fine mist, Alevaire is indicated in a wide number of pulmonary conditions. The drug acts by liquifying and removing thickened secretions obstructing the respiratory passages. Clinical reports have cited Alevaire's effectiveness in neonatal asphyxia, atelectasis, bronchial pneumonia, asthma, laryngotracheobronchitis, postoperative prophylaxis of pulmonary complications, among others.

Dosage: Continuous therapy with Alevaire over comparatively long periods is recommended in treating chronic cases. The smaller size is designed for intermittent therapy of about 30 to 90 minutes, one to three times daily.

How Supplied: Supplied in both 60 cc. and 500 cc. bottles.

Source: Winthrop-Stearns, Inc., New York City.

ARFONAD

Description: A new, short-acting vasodepressor agent for the induction of controlled hypotension during major surgery.

Action and Indications: Arfonad produces vasodilation through ganglionic blockade and direct dilation of arterioles. The drug brings about a controlled and readily reversible hypotensive response.

In neurosurgery, vascular surgery, fenestration operations and other procedures in which bleeding tends to obscure the operative field, Arfonad gives minute-to-minute control of blood pressure in accordance with the needs of the surgeon. Arfonad may also be used to advantage in pulmonary edema associated with systemic hypertension, and in the treatment of acute hypertensive crises

Dosage: Arfonad is administered by intravenous infusion. As is true of other potent hypotensive agents, Arfonad should be employed only by those thoroughly familiar with the properties of the drug and the technique of administration.

How Supplied: Arfonad Camphorsulfonate 'Roche,' brand of trimethaphan camphorsulfonate, is available in 10-cc ampuls containing 50 mg. Arfonad per cc, packages of 6 and 25.

Source: Hoffmann-LaRoche Inc., Nutley, N. J. GANTRISIN OPHTHALMIC SOLUTION Description: A new 5 cc. package of Gantrisin

Diethanolamine Ophthalmic Solution 'Roche,' 4 percent. This 5 cc. vial (with dropper) will be offered in addition to the ½ oz. vial introduced recently. Both sizes will replace the 1 oz. vial marketed previously.

Indications: Gantrisin Ophthalmic Solution is an isotonic antibacterial solution with the same pH as that of tears. The new 5-cc vial of sterile solution is designed for the convenience of physicians, industrial clinics, and hospital out-patient departments needing small quantities only. This amount of Gantrisin Ophthalmic Solution is adequate for prophylaxis following removal of foreign bodies, and for effective treatment of corneal ulcers and conjunctivitis.

Source: Hoffmann-LaRoche, Nutley, N. J.

TRONOTHANE HYDROCHLORIDE

Description: Tronothane hydrochloride, brand of Pramoxine Hydrochloride, Abbott is a new surface anesthetic chemically different from the cocaine type synthetics. Chemically it is 4-n-butoxyphenyl-gamma-morpholinopropyl ether hydrochloride.

Indications: The uniqueness of chemical structure permits the use of Tronothane where sensitization to other anesthetic agents is known or suspected. Patients who exhibit sensitization to the "caine" drugs, or other surface anesthetics, can generally use Tronothane with excellent results.

Clinical reports indicate that this drug provides excellent relief from episiotomy pain following application to the incisional area. Considerable success has also been obtained in symptomatic relief of pruritus vulvae and pruritus ani using this anesthetic.

Tronothane has also been found to give 92% good to excellent results in relieving pain following hemorrhoidectomy, repair of fissure in ano, and anal ulcers.

Tronothane HC1 1% Jelly was used topically in a series of 47 cases where intubation procedures were required during the course of anesthesia. Results were reported excellent in terms of (a) aiding the introduction of the tube into the trachea or gastrointestinal tract, (b) keeping those in situ for the necessary postoperative period, and (c) eliminating subsequent discomfort.

In dermatology, the anesthetic has been reported to give symptomatic relief in

chronic lichen simplex, dermatitis herpetiformis, pityriasis rosea, herpes simplex, psoriasis, neurodermatitis, pruritis ani, pruritis vulvae, epidermophytosis, dermatoses of atopic, factitial, eczematoid, and stasic origin, as well as other skin conditions where itching and scratching are frequently obstacles to proper diagnosis and basic therapy.

How Supplied: Tronothane HC1 is supplied in the following forms:

Jelly, 1%, 1 oz. tubes with rectal applicator. Cream, 1%, 1 oz. tubes with rectal applicator.

Compound Lotion, 4 oz. bottles.

(1% Tronothane, with ZnO, prepared calamine and menthol in a flesh colored base)

Topical solution, 1% in a sterile aqueous solution, 15 cc. vials.

Source: Abbott Laboratories, North Chicago, Illinois.

RAU-SED

Description: Rau-sed is the crystalline alkaloid reserpine, isolated from rauwolfia. It is a nonbarbiturate, tranquilizing sedative.

Actions and Indications: The site of action is believed to be the hypothalamus. Rau-sed has a sedative and tranquilizing effect resulting in improvement in mood and outlook. Rau-sed is not a hypnotic and differs from the barbiturates in that the calming effect is accompanied by a minimum of lethargy. Habituation has not been reported. The sedative activity of Rau-sed exceeds its hypotensive activity and it is primarily useful, therefore, as a sedative and tranquilizing agent.

Rau-sed may be useful in a wide variety of conditions in which the barbiturates are

ordinarily used. These include psychoneuroses and related conditions, psychoses and as a sedative in tense or anxious patients, especially those complaining of insomnia. For this purpose it may be preferable to barbiturates because it does not interfere with normal activity or alertness, provided dosage is properly adjusted. Rau-sed is not recommended as a single dose sedative because its action is delayed, but patients on maintenance doses of Rau-sed usually sleep without recourse to hypnotics.

Dosage: Therapy usually continues 3 to 5 days before effects are noted. This period may be longer or shorter depending upon the dose. As in digitalization there may be a saturation period on a high dose which may be 0.5 mg. to 2 mg. daily in single or divided doses. When the desired therapeutic result is obtained the dose may be reduced to a maintenance level which may be 0.1 to 0.5 mg. or more daily. Some physicians prefer to initiate and continue therapy at the maintenance level.

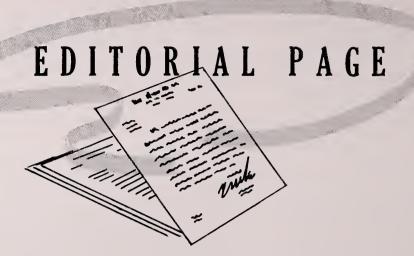
Several cases of severe mental depression have been reported with this drug; if sedation is excessive the dose should be reduced or the drug discontinued.

Rau-sed may produce nasal congestion, drowsiness, looseness of the bowels and occasionally bizarre dreams. These side effects are not troublesome in most patients and tend to disappear as medication is continued. They can usually be alleviated by reducing the dose.

How Supplied: Tablets of 0.1 and 0.25 mg., bottles of 100 and 1000; tablets of 0.5 mg., bottles of 50 and 500.

Source: E. R. Squibb, New York.

"If you want to sell me on a line, just give me a solid 'reason why.' The Schmid people are doing it with their medical Trichomonal Re-Infection Control program. It's actually sending new customers and business into my store for XXXX FOUREX(R) RAMSES,(R) and SHEIK.(R) They've earned my support."



HIGH SCHOOL SCIENCE COURSE ENROLLMENTS DECREASE

A report issued by the United States Office of Education shows that senior high school enrollments in chemistry, physics and mathematics, cornerstones of scientific training, have been markedly declining during the past 40 years.

This is indeed unfortunate when America has such a heavy demand for scientific-trained personnel. Our public high schools have a challenge — to provide colleges and universities with a greater number of students equipped to continue their training in a scientific career.

The following table shows the percentages of those taking three high school courses basic to scientific training, to total enrollments:

Enrollment by Percentages in Selected U. S. High School Courses*

Year	Plane Geometry	Chemistry	Physics
1890	21.3	10.1	2Ž.2
1895	27.4	9.1	22.8
1900	27.4	7.7	19.0
1905		6.8	15.6
1910	30.9	6.9	14.6
1915	26.5	7.4	14.2
1922	22.7	7.4	8.9
1928	19.8	7.0	6.8
1934	17.1	7.6	6.3
1947		8.6	5.5
1948		7.6	5.4
1949	12.8		
1952		7.6	4.3
1953	11.6		
*Source	e: U. S. Office of	Education	

Two factors have been cited as contributing to this problem. The mathematics and science requirements for graduation from high school are low in many states and the number of certified science teachers has dropped about 50% in the past few years.

A 1953 Office of Education random survey of 857 schools showed that a single math course would satisfy some graduation requirements and only 8% of the schools required plane geometry for graduation. Of greater importance to us in the health professions is the fact that chemistry was seldom required for graduation.

In order to deal with this situation, colleges and universities insist that unprepared students seeking to major in a science or in engineering take make-up courses without credit.

U. S. P. XV AND N. F. X.

It now appears that the new U. S. P. XV and N. F. X will not become official before July 1, 1955. Although these books were scheduled to appear on or about January 1, 1955, delays in the revision, editing and proof-reading will make it impossible to meet the tentative schedule.

The Board of Trustees of the United States Pharmacopeal Convention fixes the date on which the U. S. P. XV will become official. The Council of the American Pharmaceutical Association, as publishers of The National Formulary, fixes the date on which the new N. F. X will become official.

It is customary to make the dates on which the revisions of these official drug compendia become effective coincide, since there are always transfers of monographs from one to the other. Too, it is important for those concerned with the labeling of U. S. P. and N. F. drugs, as well as for pharmacy students, teachers, and board of pharmacy members, that there

be no confusion as to the standards which are actually in effect.

The new books will contain many additions and deletions of drug monographs. At the present time approximately 240 drug monographs have been deleted from the National Formulary during revision and over 200 new drug monographs added. The U. S. P. is also being extensively revised and will contain many additions, with many drug monographs deleted.

Since the U. S. P. XIV and N. F. IX will be official for most if not all of the academic year 1954-55, instruction in pharmacy courses based on these monographs will use these editions. However, attention will be called to changes in the standards which are contemplated and may become official toward the end of the academic year.

ORAL PRESCRIPTION CODEINE BILL

The Martin-Long Bill to amend the Internal Revenue Code to permit the filling of oral prescriptions for certain narcotic drugs, and for other purposes, is now federal law.

The feature of the new federal law affecting pharmacists and physicians is as follows:

"In lieu of a written prescription for such narcotic drugs or compounds thereof which the Secretary, in his discretion (after considering any views expressed on the subject by the Surgeon General, United States Public Health Service; the Commissioner, United States Food and Drug Administration, the respective heads of State narcotic law enforcement agencies, and the respective secretaries of national associations representing (a) narcotic drug manufacturers, (b) physicians, and (c) pharmacists), shall find and by regulation designate to possess relatively little or no addiction liability in comparison with morphine, codeine, or cocaine, respectively, the sale, distribution may be made by a dealer to a consumer upon oral prescription of a duly registered physician, dentist, vet-

erinary surgeon, or other practitioner which oral prescription is reduced promptly to writing, and the writing filed and preserved by the dealer for a period of two years from the date on which such prescription is filled in such a way as to be readily accessible to inspection by the officers, agents, employees, and officials mentioned in section 2556. In issuing an oral prescription, the prescriber shall furnish the dealer with the same information as is required by law or regulation in case of a written prescreption for narcotic drugs or compounds thereof except for the written signature of the prescriber, and the dealer who fills such prescription shall be required to inscribe such information on the written record of the prescription made, filed and preserved by him, and shall inscribe on the label of the container of the narcotic drug or compound thereof the same information as is required in filling a written prescription. An oral prescription shall not be refilled."

The next step to implement the law will be the task of the Federal Commissioner of Narcotics. The Commissioner has authority to issue regulations determining what non-habit forming compounds with codeine or non-habit forming narcotics will be cleared for oral prescribing by the practitioner and acceptance by the pharmacist.

Codeine, as such, will **NOT** be one of these drugs. It is expected that preparations such as Aspirin Compound with Codeine, Papaverine, cough mixtures with codeine or dionin, and solutions of dionin will be cleared for oral prescriptions.

The new law is of no effect in South Dakota and most other states, however, since the state narcotic laws require written prescriptions for all narcotic drugs. In order to take advantage of the federal law, Section 22.1306 (Sales by Apothecaries) of the South Dakota Uniform Narcotic Drug Law would have to be amended.

PHARMACY Rews

FIVE YEAR PHARMACY COURSE APPROVED

The American Association of Colleges of Pharmacy (AACP) voted 53-13 in secret session to adopt a 5-year course of study.

Meeting in Boston during the American Pharmaceutical Association Convention in August, the AACP voted to amend its constitution and by-laws to direct that -- "on or after April 1, 1965, each member college shall require of each candidate for a degree in pharmacy completion of not less than 5 full academic years of training, including both pre-pharmacy instruction and a minimum of 3 years professional instruction."

Five year courses must be given to all students entering college in the fall of 1960 and thereafter, if the college wants to maintain membership in the AACP. Actual content of the program is left up to the colleges. Some colleges may have a 2 year prepharmacy program followed by 3 years of professional study. Others may integrate the basic sciences and liberal arts courss with the professional course throughout the entire 5 year period.

The AACP vote climaxes a

long period of pharmacy curriculum study by association committees, member colleges and national pharmaceutical organizations. The five year program is intended to provide more time for courses in business practice needed by the retail pharmacist, as well as time for better basic science preparation for professional courses.

MODERN PHARMACY CELEBRATES 50th ANNIVERSARY

Modern Pharmacy, one of the nation's first magazines to be published by a company in the interests of the pharmaceutical profession, celebrated its golden anniversary with the September, 1954, issue.

Parke, Davis & Company prints the slick-paper, full-color publication and distributes it bi-monthly to nearly 100,000 pharmacists and pharmacies in the United States, Canada, Puerto Rico and the Philippines.

In the lead article of the anniversary issue, the magazine states, "With this issue, Modern Pharmacy completes 50 years of service to the pharmacists . . . With this issue, too, it enters its second

half-century, determined, as was set forth in its first editorial, 50 years ago, to furnish the retail pharmacist 'with useful and reliable information on the subjects that are nearest to his heart, and, incidentally, to advertise the products of Parke, Davis & Company.' It is the intention of the present editorial staff and of the management of Parke, Davis & Company that these principles shall continue to be our guide."

One of the magazine's outstanding achievements has been the unique series of "History of Pharmacy" paintings conceived and developed by the present editor. George A. Bender. Parke-Davis commissioned the series in 1951 as a tribute to the traditions of the pharmaceutical profession, and Robert A. Thom, the artist expects to complete the project in 1957. So far, 23 of the paintings - first of their kind pertaining to pharmacy -have appeared as full-color inserts in Modern Pharmacy.

Mr. Bender graduated from the Division of Pharmacy, South Dakota State College, in 1923. He is a registered pharmacist in South Dakota.

Original Paintings Viewed

by A.PH.A.

An exhibit of 29 original

oil paintings in this series, including nine new ones shown publicly for the first time, was held in Boston in connection with the national convention of the American Pharmaceutical Association.

The convention delegates found particularly interesting the 27th painting in the series, which depicts the founding of the American Pharmaceutical Association in 1852. An explanatory caption said that, because of the need for intercommunication, educational and apprenticeship standards and quality control of imported drugs, a convention of representative pharmacists was called to meet in the Hall of the Philadelphia College of Pharmacy Oct. 6-8, 1852. Under the leadership of the first president, Daniel B. Smith, and the first secretary, William Procter, Jr., the 20 delegates launched the A.Ph.A., mapped objectives and opened its membership to "all pharmaceutists and druggists of good character" who subscribed to its Constitution and Code of Ethics.

The other new paintings in the series are entitled "Carl Wilhelm Scheele (1742-1786)". "America's First Apothecary General (1775-1783)", "Serturner, First Alkaloid Chemist (about 1816)", "Caventou, Pelletier, and Quinine (about 1820)", "American Pharmacy Builds Its Foundations (about 1821)", "The Shakers and Medicinal Herbs (about 1830)", "European and American Pharmacy Meet (1867)", and "The Father of American Pharmacy."

Bender said more than 10 years of study and planning

and two years of intensive research went into the continuing project before the actual paintings were started. They have stirred up much interest both inside and outside the pharmaceutical profession, he reported.

LARGEST ENTERING PHARMACY CLASS

Dean Floyd J. LeBlanc reports that the pharmacy class entering South Dakota State College this year is the largest in the history of the Division of Pharmacy.

A total of 76 students registered including 70 men and 6 women.

During the post World War II years, the highest number of entering pharmacy students in any year was 64.

Approximately one-third of this group entered State College with advanced standing. This is due to the student obtaining pre-pharmacy training, basic science courses or other degrees at another institution.

The freshman class this year is the first to study under the revised pharmacy curriculum. Principal among the many changes is that students will not begin introductory pharmacy courses until the sophomore year.

DARGAVEL FOUNDATION CONTRIBUTIONS PASS \$70,000 MARK

Contributions to the John W. Dargavel Foundation passed the \$70,000 mark recently, with retailers leading the way toward the Foundation's goal of \$250,000 by the time of the N.A.R.D. annual convention in October.

In making this announcement, Albert C. Fritz of Indianapolis, Foundation president, disclosed that individual retailers had already contributed, in cash, the sum of \$30,730.50. In addition, other individual retailers in Minnesota alone have pledged \$11,365, which will be paid within the next 12 months. Besides, retail druggists have obtained contributions from suppliers, which have been credited to manufacturers.

To date, Mr. Fritz said, 28 manufacturers in the drug industry have contributed a total of \$18,277.50. Two of the contributions have been of \$5,000 each. Letters of solicitation have been sent to all drug and cosmetic manufacturers by leaders of the industry, who expect that the response from this source will be appreciably stepped up now that the summer vacation season is over.

Contributions aggregating \$9,725 have been received from 19 drug wholesalers, including one contribution of \$5,000. All wholesalers have been contacted by leaders in the field.

"It is clear," Mr. Fritz said, "that the individual retailers will meet their quota of \$100,000. We are not thoroughly organized at the retail level in respect of the fund-raising drive, but the response of those contacted has been most encouraging. Indeed, I am satisfied that the retailers in the drug field will exceed their \$100,000 quota and may well double it. Of course, any retail contributions in excess of \$100,-000 will be separately administered by the Foundation."

The quota for manufac-

turers and wholesalers combined is \$150,000. Mr. Fritz said that "the example set by the retailers, who are the customers of the manufacturers and wholesalers, should stimulate these firms to contribute to the Foundation, particularly since we are asking for one-time capital contributions only."

A non-profit corporation, the John W. Dargavel Foundation was established in the name of the long-time executive secretary of the National Association of Retail Druggists. Its purpose is to "help individual retail druggists cope with serious reverses of misfortune and make loans available to students of pharmacy in need of such assistance." The Foundation is tax-exempt.

N.A.R.D. TO GIRD FOR EXPECTED FAIR TRADE BATTLE

Fair Trade laws and means to combat any attacks that may be made against them will be among the important issues to come before the 56th annual convention of The National Association of Retail Druggists, according to a statement by John W. Dargavel, executive secretary of the N.A.R.D.

Pointing out why it is important for the independent retail druggists of America to attend the convention, Mr. Dargavel said that reliable reports from Washington, D. C., indicate that the committee appointed by Attorney General Herbert Brownell to study the antitrust statutes will recommend repeal of the Fair Trade laws.

"Action to repeal Fair Trade will probably begin early next year," Mr. Dargavel said. "Therefore, the presence of as many druggists as can possibly attend the convention in Houston is necessary in order to join their voices and opinions in the determination of plans for organized defense activities."

"Efforts will also be made to scuttle the Robinson-Patman Act," Mr. Dargavel warned. (The Robinson-Patman Act makes it unlawful to grant secret rebates, preferential discounts, or to discriminate in pricing.) "The Supreme Court has already upheld one company accused by the Federal Trade Commission of violating the Act. and unless further action is taken, as will be indicated at the convention, the Act will stand nullified."

Other matters of interest to the retail druggist will also be covered at the convention, according to Mr. Dargavel. Among these will be a session devoted to public relations whereby means to enlighten attitudes of the public towards costs of prescriptions and services of the drug store will be discussed. Two full afternoon sessions will be devoted to drug store operation and the economics of retail distribution in the drug field. Comprehensive reports will detail the problems of the independent druggists and the activities devoted to the professional progress of pharmacy will be analyzed.

A. C. A. CALLS FOR MEETING WITH F. D. A.

A resolution adopted by the American College of Apothecaries in convention assembled called for a conference with the Food and Drug Administration to discuss the various phases of the F. D. A.'s regulatory and enforcement policies. The resolution urged that a meeting be held between the College, the A.Ph.A. and other interested groups to provide a better understanding between the agency and the practitioners of the profession.

Other resolutions lauded Commissioner Harry J. Anslinger for his assistance in the passage of the recent "Codeine Bill."

Dispensing of legend drugs without prescription by airline and steamship companies, as well as travel agencies, came in for condemnation. In a combined resolution the College felt that dispensing of these drugs by these agencies, as well as certain industrial firms constitute a hazard to public health and urged the F. D. A. to stop such illegal practices.





IN UROLOGY C. D. Creevy, M.D. Minneapolis, Minnesota

UROLOGICAL SYMPTOMS AND THEIR SIGNIFICANCE

This is merely a review of the common symptoms arising from disorders of the urinary tract, followed by a brief enumeration of required diagnostic studies.

Since the average male excretes in twenty-four hours about 1500 cubic centimeters of urine in quantities of around 300 cubic centimeters, he will void five times daily, the normal frequency. Since the normal female expells more urine at once, she will void two to four times. A few normal individuals will get up once at night, apparently from habit. Absence of other urinary symptoms identifies these patients. There is a normal variation from such factors as fluid intake, environmental temperature, physical activity, and nervous tension.

Pathological variations in urinary frequency result either from polyuria, characterised by an increased number of urinations of normal volume, or from pollakiuria (increased frequency), meaning an increased number of smaller urinations.

Polyuria is identified by questioning. It results from diabetes mellitus or insipidus, and from such renal lesions as nephritis, severe chronic pyelonephritis, and bilateral hydronephrosis, which impair the kidneys' ability to concentrate. Nephritis is recognized by as-

*From the Division of Urology in the Department of Surgery of the Medical School, University of Minnesota, Minneapolis.

Given before the South Dakota Medical Society at Huron on May 17, 1954.

sociated signs and symptoms.

In **hyposthenuria** the specific gravity is fixed below normal, while in **isosthenuria** it is the same as that of protein-free plasma; both result from severe bilateral renal disease.

Pollakiuria may be inflammatory, mechanical, or nervous. The inflammation may be bacterial, traumatic, or chemical. The bacterial type may be primary or may spread from adjacent viscera. Both are accompanied by pyuria and bacteriuria. The Traumatic variety results from the presence of stones or foreign bodies, or from instrumentation without infection, in which case it is transitory. The chemical type follows the excretion of hexamine or of some other irritant in the urine.

There are two **mechanical** derangements that cause increased urinary frequency: Contraction of the bladder itself due to scarring from a healed inflammation, mechanism obvious; and incomplete emptying, i.e., the capacity of the bladder is 500 cubic centimeters, but the patient is able to expell only 100 cubic centimeters at a time. He must therefore void 15 times to dispose of 1500 cubic centimeters.

Nervous pollakiuria may be organic, resulting from irritative lesions of the sensory or motor innervation, such as multiple sclerosis, Parkinson's disease, or neoplasms of the spinal cord. The functional type may be an expression of nervous tension; occasionally it follows ungratified sexual excitement. Testicular aching commonly accompanies this

type of urinary disturbance. The **reflex** variety may accompany irritative lesions of the anus or glans penis, or come from a stone in the ureteral orifice.

Burning urination is dysuria if moderate and strangury if severe. In the absence of increased urinary frequency it bespeaks inflammation distal to the sphincters. With increased frequency it points to inflammation of the prostate (or of the proximal female urethra) or bladder.

Suprapubic distress usually results from vesical irritation, such as cystitis, lithiasis, prostatitis or interstitial cystitis, and is most troublesome when urination is postponed.

Interference with the normal ease and promptness of urination results either from obstruction to the escape of urine or from reduction of the expulsive force. Narrowings distal to the sphincters commonly diminish the caliber of the stream without reducing its force until the detrusor becomes fatigued, when expulsive force also suffers. Both obstructions at the vesical neck (such as prostatic hypertrophy and cancer and contracture of the internal meatus), and atony of the detrusor, whether mechanical or neurogenic. first manifest themselves as hesitancy and impairment of the stream. A little later the patient will notice, especially upon arising, that he must void twice to empty the bladder: the detrusor becomes fatigued before emptying is complete (interrupted or intermittent urination). Presently this fatigue increases so that emptying is never complete; residual urine is now found, and nocturia usually ap-

Post urinary dribbling (just enough to soil the underwear) often appears along with the symptoms just mentioned, but it is doubtful that it relates to obstruction at the vesical neck. It is oftenest due to atony (from age?) of the perineal muscles which normally expell the last drops of urine. It may also result from a stricture which holds back a little urine, from a small diverticulum of the anterior urethra, from a pinpoint opening of the foreskin, or from disease of the nervous system.

Acute retention of the urine ordinarily follows the sudden onset of additional swelling in the already enlarged prostate from vascular engorgement or inflammation, from inflammatory edema in a stricture, or results from loss of detrusor tone incident to prolonged voluntary retention of the urine in the presence of a mild but unrecognized obstruction. Sudden painful retention or painful interruption of the stream suggest obturation of the internal urinary meatus by a stone or by a pedunculated mass such as a tumor or ureterocele.

Urinary incontinence may be true, tonic, or false. In the first there is continuous dribbling from an empty bladder. It is caused by exstrophy, various types of fistulae, and by disabled urethral sphincters, which may be incomplete, as in epispadias, paralyzed as in congenital or acquired disorders of the nervous system, or held open by postoperative fibrosis or neoplastic infiltration. There is no urge to void.

In tonic incontinence the urge is followed so promptly by micturition that soiling results. Precipitate micturition resulting only from straining is called "stress incontinence." It may accompany minor relaxations of the female urethra, or inflammations, sometimes nonbacterial, of the bladder, posterior urethra, or prostate. A common cause in the female is relaxation of the urethra plus a chronic, nonspecific urethritis with minute inflammatory polyps in the urethra just below the internal meatus. Irritative lesions of the nervous system may cause it.

False (overflow, paradoxical) incontinence is characterized by intermittent, involuntary urination from a full bladder, which is often palpable or even visible. It is due to reduced sensation in the bladder, either from prolonged pressure upon normal nerve endings by residual urine, or from disorders of the sensory centers, tracts, or peripheral nerves of the bladder. A patient whose sensorium is clouded may urinate without being aware of it even though the innervation of the bladder is intact.

Oliguria refers to a reduction in the secretion of the urine out of proportion to the intake of fluid, while anuria means complete cessation of secretion. Either may be prerenal (surgical shock, dehydration), renal (severe acute pyelonephritis, nephritis, degenerative lesions of the renal tubules, occlusion of the renal vessels); or post renal (obstruction above the ureteral orifices). One must, of course, distinguish inability to empty the bladder (retention) from inability to fill it

(anuria).

Hematuria means an interruption of the continuity of the epithelium lining the urinary tract and located somewhere above the external sphincter. A similar lesion below the sphincter will cause urethral bleeding apart from urination. The occurrence of hematuria puts upon the physician the responsibility of making certain, before he dismisses the patient, that its cause is one that does not threaten life. A diagnosis of haemorrhagic diathesis or of nephritis must be proved conclusively by unmistakable confirmatory evidence. Lacking this, one must visualize the whole urinary tract clearly before reaching a final conclusion, lest a potentially curable neoplasm be overlooked. Moreover, even though it seems obvious that the bleeding is due to a stone, active infection, or mild trauma, careful study of the whole urinary tract is still necessary to exclude the factor of coincidence. Such tenuous evidence of the cause of hematuria as "angleworm clots", shadow forms of erythrocytes, and the two glass test are not to be trusted when a real investigation is so easily accomplished.

Pyuria cannot be said to exist until pus has been found in urine so collected as to prevent contamination by vaginal secretions or by a discharge from beneath an adherent foreskin. A sterile culture cannot be regarded as conclusive unless the patient has taken no antibiotic or antiseptic for five to seven days before the urine is collected for culture.

Renal pain is characteristically located in the costovertebral angle and varies from a dull ache in a slowly progressing hydrone-phrosis to an excruciating renal colic from stone or from the passage of clots or of necrotic material from tuberculosis or tumor. Excretory urography is obviously necessary, even though the story is typical of stone. If the affected kidney is not well visualized, retrograde pyelography cannot be avoided. Only thus can tumors or tuberculosis mimicking stone be identified.

Hemoglobinuria really belongs to Internal Medicine rather than to Urology, but one must realize that red urine may contain free hemoglobin rather than red blood cells. Only rarely is this the case except in mismatched transfusions, but it may result from exposure to cold or from unwonted physical exertion in susceptible individuals, and from crush in-

juries; it may even follow infiltration of the uterine muscle by blood during labor. Microscopic examination of the urine will serve to distinguish between the two.

Obscure fever, toxemia, and anemia are not usually regarded as urinary symptoms but the occurrence of any one of them, alone or in combination, calls for a search for a neoplasm of the renal parenchyma.

UROLOGICAL EXAMINATION

Discussion of the details of physical examination of the urological patient is omitted for lack of time. Before **urinalysis** the foreskin should be retracted and the glands washed. If this is impossible, the preputial cavity should be irrigated and the first ounce voided into a separate container and discarded. If the voided urine from the female contains pus or red cells, a catheterized specimen is **required**. If a specimen is cloudy it should be acidified before concluding that pus is present.

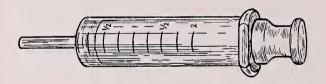
The presence of pus or red cells must always be verified by microscopic examination; cloudiness persisting after acidification may be due to bacteriuria without pus. Red urine may result from hemoglobinuria.

The two glass test is suggestive rather than diagnostic. If the first glass is cloudy or contains shreds while the second is clear, it suggests an inflammation distal to the external sphincter. A mild prostatitis may give similar findings. When both glasses are cloudy with shreds, an infection in or above the bladder is suspected, although a freely draining prostatic abscess may be responsible.

A Gram stain of the sediment from a centrifuged fresh specimen should be routine if pyuria is present. It aids in the selection of an antibiotic; if no bacteria are found, amicrobic pyuria or tuberculosis must be suspected. The former will respond promptly to 0.15 grams of neoarsphenamine intravenously on alternate days for five doses; this may be used as a diagnostic test. If this fails, the sediment of the twenty-four hour urine should be stained by the method of Ziehl-Nielsen, and also placed on appropriate culture media or inoculated into guinea pigs. If these precautions are neglected, amicrobic pyuria may become chronic and tuberculosis will advance while time is wasted in futile therapy. A culture for pyogenic organisms should also be made when the Gram stain is negative, since bacteria may grow out even when none can be found on smear. A sterile culture is not conclusive if the patient has taken a potent antibiotic or antiseptic during the preceding few days.

The next step in the male is prostatic massage. It is indicated in sacral, perineal, and testicular aching, in mild vesical irritation with clear urine, and in mild prostatism. The patient voids just beforehand, peels back the foreskin, pinches the meatus, and bends over a table. The lubricated, gloved finger strokes the gland gently but firmly from above downward and medially three or four times on each side, and once or twice down the middle. The secretion is dropped upon a clean glass slide and covered with a cover slip. More than six white cells per high power field are considered abnormal. A second massage after forty-eight hours may yield pus when none was found previously.

The **residual urine** is measured if there are symptoms of obstruction, and in the presence of incontinence. The uncovered glans is washed with soap or detergent (phisohex); cocaine* is used if the patient is apprehensive. It is helpful to inject 5 cubic centimeters of KY jelly into the urethra after the cocaine has acted. (figure one)



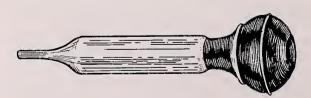


Fig. 1

Urethral syringe (above) and bulb syringe (asepto).

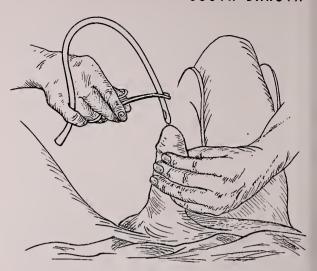


Fig. 2.
Insertion of Catheter.

A Robinson catheter size 14 French may be passed with a forceps (figure two); if it is arrested at the external sphincter, the catheter may be styletted, or a Thiemann instrument used. Never use force! If obstruction is encountered below the external sphincter, one suspects a stricture. Here one uses a filiform and LeForte follower if dilatation is desired, or a Phillips catheter follower if the residual urine is to be measured also. (figure three)

If the patient is unable to urinate and catheterization is impossible, one can aspirate the bladder suprapubically with a spinal puncture needle in an emergency. If the obstruction to the catheter was due to spasm of the sphincters, it may be possible to insert a catheter easily as soon as the bladder has been aspirated.

Sounds are for therapy rather than for diagnosis.

Roentgenograms of the urinary tract are required by renal pain, tenderness, obscure fever and toxemia, persistent pyuria, hematuria, vesical irritation, prostatic nodules, and trauma to the urinary tract. Preparation is important. Those addicted to laxatives receive 60 cubic centimeters (2 ounces) of castor oil; others do as well with the same amount of milk of magnesia at bedtime. Fluids are withheld; a light, dry breakfast is better than none. Patients without severe hypertension or coronary disease receive a cubic centimeter of pitressin 45 minutes before the radiograph

^{*} Four and a half grains (270 milligrams) of cocaine are freshly dissolved in ten cubic centimeters of sterile distilled water and injected gently into the urethra and retained for ten minutes with a strip of gauze wrapped snugly around the penis behind the corona, or with a penis clamp.

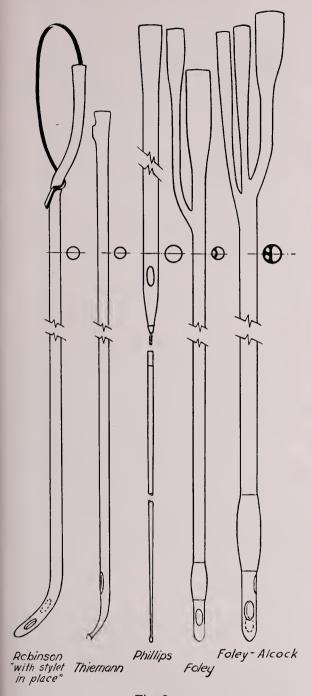


Fig. 3.

(which is best made in the morning) and go to the toilet. A small dose of a quick-acting barbiturate may help the nervous patient to refrain from swallowing air which is the source of intestinal gas. One looks for lesions of bone, alterations in the size, shape, and position of the renal outlines, for calcifications, and for changes in the psoas margins.

In general, if a plain roentgenogram (KUB)

is worthwhile, an **excretory urogram** should also be made, but should invariably be preceded by a KUB, lest a stone be concealed by contrast agent. Compression is applied with a roll of towels between the iliac crests, and



Fig. 4.
Urogram with Compression.

the conventional compression band. Properly applied, this greatly improves filling of the kidneys. (figures four & five) An ampoule of 50 percent neoiopax is given intravenously, preferably through a large needle. Properly done in the presence of good renal function, excretory urography will reveal such disorders as renal anomalies, stone, hydrone-phrosis, neoplasms, tuberculosis, ureteroceles and ureteral strictures, extravasations due to renal and vesical trauma, vesical diverticula, etc. When the urogram does not clearly delineate the suspected disorder, cystoscopy and retrograde pyelography are required.

The cystogram requires the preparation outlined above. That which occurs during excretory urography is often unsatisfactory because of incomplete filling; to secure it takes so long that it is preferable to fill the bladder to the point of slight discomfort through a catheter with a contrast agent such as five percent Hippuran or Skiodan. The catheter



Fig. 5.
Same urogram after removal of compression.

is withdrawn and films are exposed in the anteroposterior, right, and left oblique directions. The cystogram is of value chiefly in demonstrating trabeculation, diverticula, transparent stones, large ureteroceles, tumors large enough to displace an appreciable amount of contrast agent, intravesical intrusions of the prostate, and extravasations due to rupture of the bladder. A normal cystogram never excludes a small vesical neoplasm nor transparent stone; this requires cystoscopy.

The urethrogram is made by cleaning out the bowel and cocainizing the uretha as already described. Ten cubic centimeters of 40 percent Skiodan or Hippuran in KY jelly are injected gently with an urethral syringe, with the patient in an oblique position. The film is exposed as the last of the contrast agent is being injected or the prostatic urethra will not be seen. The urethrogram is of great value in delineating the number, caliber, and length of strictures, and the length and configuration of the prostatic urethra. Dilated prostatic ducts and abscess cavities, and urethral diverticula are also seen.

Cystoscopy requires the same preparation as urography. It may be done with local anesthesia in the complacent patient, but general or regional anesthetics are preferred in apprehensive ones and in those with active cystitis, enlarged prostates, or those requiring cystoscopic operations. Cystoscopy is required in hematuria, persistent pyuria, vesical dysfunction, and for retrograde pyelography when the excretory urogram is unsatisfactory. It is of course, a valuable therapeutic medium as well.

It is often desirable to give a "wide spectrum" antibiotic for twelve hours before and after any instrumentation of the urethra, particularly in the presence of fever, pyuria, or prostatic enlargement. This will prevent many unpleasant reactions.

Although developed by Dos Santos twentyfive years ago, aortography was never widely used until Smith, Rush, and Evans showed that it was safe and useful. The aorta is punctured from behind at the level of TXI with a long 18 gauge needle under general anesthesia, and 20 to 35 cubic centimeters of 70 percent Urokon are injected rapidly. A film is exposed at the end of injection; two more are exposed as soon as possible thereafter. Thus one may visualize the blood supply of a temporarily functionless kidney to ascertain whether it is worth saving; atrophies and hyperplasias as well as congenital renal anomalies are clearly depicted. The procedure is of value in Urology chiefly in differentiating renal cysts from parenchymal neoplasms.



PRACTICAL CONSIDERATIONS IN THE USE OF ANTICOAGULANT DRUGS

by

Franklin A. Kyser, M.D., F.A.C.P.*

Evanston, Illinois

In 1941 Butt, Allen and Bollman¹ published the first report on the use of dicumarol in clinical medicine. Since that time a large volume of material has accumulated describing new anticoagulant drugs and the indications and contraindications for their use. On some phases of this subject there is a definite unanimity of opinion, while other aspects of the problem have become quite controversial. The first portion of this discussion will review briefly the generally accepted principles of anticoagulant therapy before attempting to consider that phase of the subject upon which opinion is divided.

The ideal agent for preventing coagulation of the blood has not yet been discovered. If we elect to use those drugs now available, the clinician must be thoroughly familiar with the hazards of their use and must be prepared to control their administration with proper laboratory studies. Accurate prothrombin determinations are essential for the use of dicumarol, tromexan or related drugs, while careful observation of the coagulation time is necessary if heparin is to be used.

Indications and Contraindications for Anticoagulant Drugs

Table I lists the generally accepted indications for the use of one or more anticoagulant

* From the Department of Medicine, Northwestern University Medical School and the Evanston Hospital. Read before the S. D. State Medical Association at Huron, S. D., May 18, 1954. drugs. If an immediate effect is desired, it is advisable to administer heparin until the delayed effect of one of the slower acting agents becomes apparent.

TABLE I

Indications for Anticoagulant Therapy "Short Term Therapy"

- 1. Sudden arterial occlusion
- 2. Venous thrombosis (phlebothrombosis)
- 3. Pulmonary embolism or pulmonary artery thrombosis
- 4. Trauma to blood vessels
- 5. Post-operative and post-partum patientsfor specific reasons only
- 6. General vascular operations
- 7. Mesenteric thrombosis and embolism
- 8. Frostbite
- 9. Myocardial infarction*

"Long Term Therapy"

- 1. Chronic auricular fibrillation
- 2. Recurrent myocardial infarction
- 3. Chronic congestive heart failure
- 4. Recurrent cerebral thrombosis

The asterisk after myocardial infarction is to emphasize the controversial nature of this indication and will be discussed in detail later.

The contraindications for anticoagulant drugs are listed in Table II.

TABLE II

Contraindications to Anticoagulant Therapy

- 1. Vitamin K deficiency
- 2. Severe liver disease
- 3. Renal insufficiency
- 4. Duodenal ulcer
- 5. Recent operations on the brain or spinal cord
- 6. Blood dyscrasias with a bleeding tendency
- 7. Late pregnancy
- 8. Subacute bacterial endocarditis

Short Term Therapy in Acute Myocardial Infarction

The treatment of myocardial infarction with anticoagulant drugs deserves special consideration. A review of recent publication on this subject reveals that opinion is divided. Irving Wright² and his associates have recently stated that "anticoagulants correctly used exert a markedly favorable influence on both the death rate and the thromboembolic complication rate associated with myocardial infarction." Nichol and Page,³ Parker and Barker⁴ and others⁵ have expressed similar views.

Russek⁶ has led the opposition against the routine use of anticoagulants. He has stated that this method of treatment is costly and dangerous and should be used only in the severely ill patient. Sigler⁷ and Rytand⁸ have also revealed an unfavorable attitude toward anticoagulant therapy.

Our own thoughts have been clarified by a review of 455 patients at the Evanston Hospital. In this study any patient who expired within 24 hours or whose history indicated that the onset of the infarction occurred more than 72 hours previous to admission was not included. The results previously published are tabulated in Tables III through IX.

TABLE III
Total Mortality

Number of Patients 455	Lived	Died	Mortality %
	275	180	39.5

TABLE IV Mortality of First Attack

Number of	Lived	Died	Mortality %
Patients 390	355	135	34.6

TABLE V

Mortality of Group Suffering More Than One Attack

Number of	Lived	Died	Mortality %
Patients 65	20	45	69.2

TABLE VI

Effect of Anticoagulants on Mortality of Patients Suffering First Attack

Number of	Lived	Died	Mortality %
Patients 140	113	27	19.2

TABLE VII

Mortality of Patients Suffering First Attack Who Did Not Receive Anticoagulants

Number of	Lived	Died	Mortality %
Patients 250	142	108	43.

TABLE VIII

Effect of Anticoagulants on Mortality of Patients Suffering More Than One Attack

	_		
Number of	Lived	Died	Mortality %
Patients 16	11	5	31.2

TABLE IX

Mortality of Patients Suffering More Than One Attack Who Did Not Receive Anticoagulants

Number of	Lived	Died	Mortality %
Patients 49	9	40	81.6

Although this series does not lend itself to statistical evaluation because of lack of a control group, one cannot help but gain the clinical impression that anticoagulant therapy is of definite value in reducing mortality. We do feel that embolic phenomena from venous thrombi in the legs can be prevented without anticoagulants by proper attention to leg massage and passive exercises. However, emboli from a mural thrombosis may be equally serious and our only hope of preventing this complication is with anticoagulant drugs. Howell and I⁹ have recently studied

autopsied patients who died as a result of acute myocardial infarction. In 98 persons who did not receive anticoagulants 53 patients, or 54%, had mural thrombi. Thirtyfour patients did receive anticoagulants and of this group 10 individuals, or 29.5%, had mural thrombi. Despite the small number of patients, a chi-square analysis of these figures reveals the results to be statistically significant.

Comment on Short Term Therapy

From the results of others as well as from the data here presented it would appear that anticoagulant therapy, when properly controlled with adequate laboratory determinations, is of value in the treatment of acute myocardial infarction. One cannot be certain that the apparent value of these agents is entirely due to the effect on the clotting mechanism of the blood. It is possible that these drugs may have some unknown value, which improves the prognosis in patients with infarction of the heart.

Russek⁶ has indicated that only the critically ill patient should receive anticoagulant therapy. No one denies the correctness of his indications but certainly one might question the properiety of withholding this type of treatment until the critical stage is reached. When the patient with myocardial infarction is first seen, shortly after the onset of the attack, it may be most difficult to predict the future course of events. Sudden death may ensue or shock or heart failure may appear hours later. For this reason, it would seem desirable to give the patient the benefit of treatment when the diagnosis is first suspected and then, after an adequate period of observation, if critical signs do not appear, the physician may at his discretion discontinue anticoagulant therapy. The advantages of properly controlled treatment far outweigh the dangers of serious bleeding. If the latter occurs, as it occasionally does, the intravenous administration of 50 to 100 mg, of an emulsion of vitamin K1. or the oral administration of 500 to 1000 mg. of Vitamin K1. will quickly rectify the situation.

Long Term Anticoagulant Therapy

As indicated in Table I certain conditions may predispose to recurrent embolization or arterial occlusion. The prevention of such episodes may be accomplished in well selected cases by the prolonged administration of an anticoagulant drug.

Nichol¹⁰ has emphasized that embolic complications occur in 4-8% of patients with rheumatic heart disease. The individual who has recovered from one or two coronary occlusions faces the constant threat of a recurrent attack. The restricted activity and diuretic treatment of chronic congestive heart failure enhances the possibility of vascular accidents in this condition.

When faced with these types of problems, it would seem wise to consider the advisability of long term anticoagulant therapy. One must carefully measure the advantages and disadvantages in the individual patient, keeping in mind the difficulties and necessity of adequate prothrombin control over a long period of time. The patient must be warned of the dangers inherent in such a program and must realize that despite our best efforts, recurrent trouble may appear. The author has seen one patient who was placed on long term therapy after three acute arterial occlusions in one year. She then went three years without difficulty but developed a coronary thrombosis while still under treatment.

In managing any serious illness the clinician must thoughtfully consider all useful forms of therapy. Therapeutic nihilism is as bad as therapeutic enthusiasm. No drug replaces careful observation and keen clinical judgment. It is the author's opinion that anticoagulant drugs, when properly and carefully used are valuable additions to the physician's armamentorium.

SUMMARY

The indications and contraindications for anticoagulant therapy are described. Results of a recent study are presented indicating that anti-coagulant drugs reduced the mortality rate and incidence of mural thrombosis following myocardial infarction. The possible value of long term anticoagulant therapy in well selected cases is dis-

REFERENCES
Butt, H. R., Allen, E. V. and Bollman, J. L.,
Preparation from Spoiled Sweet Clover [3-3'methyl-bis-(4-hydroxycoumarin)] Which Prolongs Coagulation and Prothronbin Time of Blood. Preliminary Report of Experimental and Clinical Studies. Proc. Staff Meet. Mayo

Clinic, 16, 388, 1941.
Wright, I. S., Beck, D. F., and Marple, C. D.,
Myocardial Infarction and Its Treatment With Myocardial Infarction and its Treatment With Anticoagulants. A Summary of the Findings for 1031 Cases. Mod. Concepts of Cardiovasc. Disease, 23, 208, 1954.

3. Nichol, E. S. and Page, S. N., Dicumarol Therapy in Coronary Thrombosis J. Florida M. A., 32, 365, 1946.

4. Parker, B. L. and Barker, N. W. The Effect.

4. Parker, R. L. and Barker, N. W., The Effect of Anticoagulants on the Incidence of Throm-(Continued on Page 407)



MODERN DRUG THERAPY* Arthur Grollman, M.D., Ph.D., F.A.C.P. Dallas, Texas

The present century has witnessed the evolution of drug therapy from the empirical use of preparations of doubtful virtue at the beginning of the century; to an attitude of nihilism by the more scientifically minded, which characterized the early decades; to the present therapeutic age when numerous drugs of remarkable curative value are in daily use. Oliver Wendell Holmes and Sir William Osler, who scorned the few drugs at their disposal would marvel at the ease with which the present day physician approaches such scourges of their day as post-partum sepsis, pneumonia, meningococcal meningitis, bacterial endocarditis, syphilis, tuberculosis, diabetes, etc. This advance in therapeutics made possible by the introduction of a host of effective drugs has contributed no small part to the prolongation in life and reduction in human suffering effected by medical progress in the twentieth century.

A knowledge of therapeutics was of little importance or necessity to the physician of an earlier day. To the modern physician, on the other hand, a sound knowledge of pharmacology and therapeutics is essential if he is to utilize at their best the drugs at his disposal. Such knowledge is essential also if he is to avoid the potential harm inherent in the misadvised use not only of such potent medicaments as digitalis, hormonal agents, anti-infectives, etc., but even of such relatively benign agents as water or oxygen when these are contraindicated.

*Read before the South Dakota State Medical Society at its Annual Meeting, Huron, South Dakota, May 18, 1954

The art of therapy involves more than a knowledge of the therapeutic uses, dosage and method of administration of drugs. Such facts can easily be acquired from textbooks or, in the case of proprietary preparations, from the advertising matter which floods our daily mail. To use drugs effectively and to their best advantage, one must also have an intimate knowledge of the pathologic physiology of the disease under treatment and the pharmacodynamics of the drug under consideration. Only in this way can the physician determine which of the many drugs available for a given purpose will serve most safely and effectively. Too often, under the pressure of commercial exploitation of some newer agent, an older and perhaps more effective agent may be overlooked.

To illustrate the indispensability of a knowledge of the basic pathologic features of the condition to be remedied and the pharmacologic action of the drug, we may cite the use of diuretics. These agents may act by simple osmotic effect, as in the case of water, urea, or the saline diuretics; by increasing the glomerular filtration rate as in the case of the xanthine drugs; by inhibiting reabsorption in the distal tubule, as in the case of the mercurials; or by inhibiting carbonic anhydrase in the tubule thereby preventing reabsorption from the tubular lumen, as in the case of acetazoleamide (diamox (R)). It is futile to persist in using a mecurial in the face of a diminished rate of glomerular filtration as is frequently the case in patients with heart failure or depleted extracellular fluid volume. Only by a consideration of the underlying

defect in renal function can one select the optimal agent to be used in a given patient.

The natural tendency to associate the use of a given drug with some specific abnormality or symptom may often lead to its misuse. For example, estrogen causes endometrial growth. In the case of an atrophic endometrium, the administration of estrogen may overcome an accompanying metrorrhagia. On the other hand, under other conditions administration of this same drug may perpetuate or aggravate an already existent metrorrhagia. Obviously, then, one must take into account not only the action of a drug but also the particular condition in the organism that one is attempting to modify. To utilize estrogens for all menstrual abnormalities is obviously irrational. Also to be deprecated is the practice of attributing all symptoms of complaint occurring in women during their fifth decade of life to the "menopause" and treating by the promiscuous use of sex hormones. The mere fact that desiccated thyroid is effective in relieving abnormalities of the menstrual cycle, epidermal tissues or neuromuscular system when these are due to hypothyroidism is no excuse for the promiscuous use of this hormone in conditions where no such deficiency exists.

All drugs are potentially harmful and the physician must always be alert to the undesired side-effects which a drug may induce. Not infrequently these undesirable reactions may be masked by the underlying disease which is being treated. The administration of so innocuous a substance as water, for example, in a patient who is salt depleted may lead to water intoxication. The nausea and vomiting induced by the latter condition will, in turn, cause a further loss of salt and accentuate the condition. The administration of oxygen under certain conditions of anoxia may actually depress the respiration further and worsen the patient's condition.

The toxic effects of drugs may be classified as 1) those due to the direct action of the drug, and 2) those resulting from an idiosyncrasy on the part of the patient. An example of the former is the toxic effect of digitalis when used in an excessive dosage or even in normal dosage in certain conditions. Administered to the normal individual or one with normal cardiac function, digitalis produces dyspnea and other signs of cardiac failure —

the very conditions which in the failing heart it ameliorates. In constrictive pericarditis, likewise, this drug may induce or, if already present, worsen congestive failure. This apparent paradox in the action of the drug is readily understandable if one considers its mode of action. ¹

Many individuals manifest an idiosyncrasy to certain drugs. Every physician has encountered patients who cannot tolerate aspirin or who react adversely to barbiturates or to morphine. In addition to this form of drug sensitivity, repeated use of many drugs may lead to an acquired sensitization which may have serious consequences. This latter condition is characterized by fever, various forms of skin reactions, depression of the hematopoietic function of the bone marrow, etc. The skin eruptions which follow the use of penicillin, the arthralgia seen in serum sickness, the agranulocytosis observed following amidopyrine, gold and arsenic, are well known. These reactions must be detected in their incipiency and the drug withdrawn if serious consequences are to be avoided.

A common abuse of therapy consists in the promiscuous use of drugs in conditions in which simpler, safer and cheaper measures are equally effective or for disorders in which they are of little or no value. For example, the use of penicillin and antibiotics for the common cold against which they exert no action; or the use of cortisone and corticotropin as panaceas for disorders remediable by simpler measures, is to be deprecated. The wise physician will not be stampeded into the promiscuous use of a drug, despite the enthusiastic acclaim with which its advent may be heralded, but will be guided always by the sound principles of scientific medicine.

In no branch of medical practice is the "art" of medicine more dominant than in therapeutics. The application of this "art" requires not only a knowledge of the pathologic physiology of the disease under treatment, and of the pharmacodynamic action of the drug being used, but also careful observation of the results of therapy. Close attention to the latter will enable the physician to choose, for example, between the various preparations of digitalis most suitable in a given patient to elicit the desired response, and how to regulate the dosage to obtain maximum benefit

(Continued on Page 407)



THE HELPING HAND

Members of the South Dakota State Medical Association's Committee on Prepayment Plans have been impressed with the cooperation and assistance given them by out-of-state organizations in their quest for information on a Blue Shield plan.

On October 20th the full committee met in Omaha where they were treated royally by officials of Nebraska Blue Shield. Nebraska's attorney, Mr. Ed McDermott discussed Blue Shield enabling legislation and establishment of articles of incorporation, constitution and by-laws. Dr. A. J. Offerman, Nebraska Plan president, discussed doctor management of Blue Shield.

These men spent the major part of a day at their own expense to help the South Dakota studies. Other Blue Shield personnel explained details of the operation and the Blue Shield plan played host to seven South Dakotans for a day and a half.

Woodrow Sherin, executive-director of Iowa Blue Shield, came to Omaha for the purpose of meeting with the South Dakota doctors.

Neither the Nebraska nor the Iowa Blue Shield people involved will benefit from a South Dakota Blue Shield plan. Their interest and willingness to spend time and money helping us is a tribute to their zeal and sincerity — their determination to place the services of the medical profession directly before the American public.

The S. D. Journal of Medicine salutes our neighbors — they have truly extended us a helping hand.

BLUE SHIELD GROWS

We note that Blue Shield Plans have passed the 30 million mark in enrollment, nationally. The announcement came from the Blue Shield Commission, national office in Chicago, which compiles national statistics based on data received from the individual Plans.

Since Blue Shield is the medical profession's own program, and a very young one at that, physicians can well be proud of this remarkable evidence of its solid popularity with the American public. And growth still continues at an amazing pace. More than three million new members were added in the past 12 months alone.

Significant, at the present writing, is certain Federal legislation, now in the planning stage and scheduled for presentation to Congress early in the forthcoming session, designed to throw the Government's weight into support of voluntary medical care prepayment, rather than in support of compulsory, Government-controlled insurance such as was the long-time goal of the New Deal and Fair Deal in Washington.

The legislation referred to is an extension and amplification of the Carlson Bill (S. 3803) which was introduced near the close of the 83rd Congress, too late for Congressional action. The proposal, in substance, is for the Government to provide payroll deduction facilities for all Federal employees desiring to obtain medical and hospital care insurance through voluntary plans (Blue Cross and Blue Shield, or commercial carriers), and to contribute a portion of the premium cost for each employee.

Even without payroll deduction or any contribution, more than 1,300,000 Federal Government employees (with their dependents) are already enrolled in Blue Cross, and more than 800,000 in Blue Shield. Under the new, more favorable arrangement, it is expected that most of the entire Federal civilian payroll (2,200,000 employees, totalling, with their dependents, 5,300,000 people) will take advantage of this opportunity.

Chosen to be the 30 millionth Blue Shield member was a Federal employee, Elmer T. Linstrom, a postal carrier in Omaha, Nebraska. The occasion was celebrated by a ceremony on October 19, in Omaha, at which Dr. L. Howard Schriver of Cincinnati, President of the national Blue Shield Medical Care Plans, gave the principal address. The occasion also marked the tenth anniversary of the Blue Shield Plan in Nebraska.

Dr. Schriver called upon physicians everywhere to continue to strengthen their support of Blue Shield in their local areas, in order to assure its continued dynamic growth and thus top, once and for all, the pressures which still exist for a nationalized Governmental health insurance scheme. He mentioned that latest tabulations show a total of \$273,723,925 paid to physicians by the Blue Shield Plans during the 12 months ended June 30, 1954. This represented more than 80 per cent of total income of the Plans.

Pointing up the present Administration's real interest in and sympathy with the Blue Shield movement was a letter addressed to Mr. Linstrom by Nelson A. Rockefeller, Under Secretary of the Department of Health, Education and Welfare. Mr. Rockefeller said, in part:

"It is a pleasure to send you greetings as you become the 30 millionth Blue Shield member . . . You can feel gratification in having provided this protection for the health of your family. It has national significance as a milestone . . . I note that you are a Federal Government employee. As you probably know, the President has proposed a prepayment health care plan for Government employees similar to those maintained by many industrial organizations. It is my sincere hope that the Administration's plans for aiding all Federal employees in providing protection against health costs soon will become a reality."

Such recognition was not won by indifference, but by the active support of Blue Shield by the great majority of the nation's physicians. It can be maintained only by even more active and whole-hearted co-operation on the part of the medical profession. And it **must** be maintained, if the free practice of medicine is to continue.

THE MONTH IN WASHINGTON

Although the elections back home are more stimulating than Washington doings these fall weeks, some of the quiet planning going on at the Pentagon should be of more passing interest to physicians, young and old. The objectives are familiar: First, to insure a steady supply of physicians for the services; second, to improve the medical care program for military dependents. Primarily responsible for working things out are Dr. Frank Berry, Assistant Secretary of Defense for medical affairs, and the officers assisting him.

To insure that the services will get the physicians they need after the scheduled expiration of the Doctor Draft Act next July 1—without disrupting residency training—a plan bearing the formidable name of the Armed Forces Reserve Medical Officer Commissioning and Residency Consideration Program has been put into effect. It applies only to interns who have had no prior military service, and who therefore have a two-year obligation for service under the regular draft.

The plan's first deadline was October 10. By that time these young physicians were to have sent in to the Defense Department a form with the following information: Their first, second, and third choices among the services, whether they wanted additional deferment for residencies and if so choice of hospitals, and the preferred specialties. Any in this group who do not apply for reserve commissions will be subject to the regular draft, will not be considered for residency deferments, and will not have a choice of services.

There is another problem involved. It is estimated that about half of the interns will want residency deferments. However, not more than a quarter can be deferred if the Army, Navy, and Air Force are to get their quotas of physicians. This is being resolved by a lottery. Those winning deferments will stay in the reserves, and be called up for duty

as their specialties are needed after the completion of their residencies. Those losing out will be called as needed at the end of their internships. The 50% not asking for deferments will be allowed a choice of the month to be called up, a privilege not accorded the others.

On the dependent medical care program, Dr. Berry's annual report discloses that the Department is all set to put the expanded plan into operation, should Congress enact it. An implementing directive has been drawn up, a tentative fee schedule modeled on the VA "Guide for Medical Services" has been prepared, and a uniform "Military Dependent Identification Card" has been developed and placed in limited use by the Navy and Air Force.

A dependent care bill was introduced last session, but not pressed by Defense Department. It provides a uniform program for the three services, with dependents defined and the extent of care limited. It also would have the military medical departments take care of all the dependents they could handle, with only the remainder going to private physicians and hospitals. The American Medical Association believes this should be reversed, with emphasis on private, non-government care for dependents.

The Defense Department is interested in other devices to keep up the quality as well as the number of its physicians. One of these is a scholarship program, which would require one year of military service for each scholarship year. Because regular draft time could be served out this way, any scholarship contract would call for a minimum of three years' active duty. The Department has high hopes that this program will be authorized by the next Congress. It also is hopeful that, once in operation, the scholarship contracts would result in more young physicians joining the regular Army.

Meanwhile the Hoover Commission on Organization of the Executive Branch and the Kestnbaum Commission on Intergovernmental Relations continue with their studies and report-writing, efforts that now are definitely unspectacular but that ultimately could mean important changes in the government's medical programs.

The Hoover Medical Task Force is nearing the end of its long review of all federal medical operations. Its recommendations will be submitted to the full commission for consideration in the commission's report to the President, due at the White House next May.

The Kestnbaum commission's work of greatest medical interest is the study of health grants-in-aid, on which a special committee has just completed its report. The full commission is scheduled to report back to Congress by next March.

Letter to the Association

St. George's Mission Hospital, Punalur P. O. Travancore, S. India 24th July 1954

Gentleman:

I wish to inform you that the above Hospital is a non-profit organization situated in a hilly village and working among the poor labour classes of the locality and its suburbs. As good medical literatures are very few in this part of the world, a small library is started recently, attached to the above Hospital with the idea of collecting used medical journals, books, bulletins, reprints of articles and Transactions of Medical Societies from all available sources in foreign countries so that up-to-date knowledge in Medical Practice may be obtained.

Further Ayurvedic and Unani systems of Medicine are very troublesome competitors to Allopathic system here and proper equipments and medical literatures are highly essential for the successful management of the Hospital.

In the light of the above circumstances, I request you to kindly issue a News Note in your monthly Bulletin and also in your Society Medical Journal requesting the sympathetic members of your Society to send me their used medical journals with all available backward copis, Medical Books, reprints of articles and other useful medical literatures and also second-hand Surgical Instruments, Medical Appliances, Laboratory equipments etc., so that many of our poor patients may directly and indirectly be benefitted by them.

This Act of Kindness and Charity by the members of your Society will ever be remembered which lapse of time cannot wipe away from our memory.

Thanking you very much for all your valuable services.

Dr. T. K. Thomas, Hon. Medical Superintendent



Is Blue Shield really the answer to voluntary health insurance? Is it the sound buffer against compulsory health insurance that many of us have been led to believe? Is Blue Shield applicable to conditions in our own state? These and many other questions along these lines have been coming to our minds for a long time. To satisfy myself I have done considerable traveling during the past weeks. I have discussed Blue Shield with doctors from at least five different states that have had Blue Shield Plans in operation for a number of years. Some of these men had been participating in one or another of these plans since their inception some ten years



ago. The enthusiastic endorsement of Blue Shield by these doctors amazed me, especially since I had some rather uncertain feelings myself. Perhaps it is more or less natural to oppose things that are not quite clear to us.

Certainly I do not feel that Blue Shield is the entire solution to our insurance problems, but I am beginning to feel that it is a long step in the right direction. At least one must confess the plan has its merits and that it is the plan of the medical profession, a plan that we can control.

Some weeks ago you all received a questionnaire from your executive secretary's office regarding the establishment of a Blue Shield Plan in South Dakota. The response was exceptionally good. Roughly five out of every six doctors answering the inquiry indicated they were for some form of Blue Shield. Several men told me that they did not answer the questionnaire because they did not know enough about the plan. This is not unusual because I found that in some areas where the plan has been in operation as long as ten years, there are men who still are not too familiar with details of operation.

If you have not answered the questionnaire, your officers and councilors will appreciate your doing so. We feel that every member of the state society should have a voice in deciding whether or not a Blue Shield plan should be adopted.

A. W. Spiry, M.D.

MEDICAL LIBRARY BOOKSHELF

Surgical Journals

The University Medical Library subscribes to a number of surgical journals, which because of the up to date information about the many advances in the various branches of this specialized field, are a valuable adjunct to our journal collection. These journals with selective articles are:

Acta Chirurgica Scandinavica.

Published in Stockholm this contains original articles dealing with investigations in the field of surgery. These appear in English, French, or German, but every paper is accompanied by an author's summary in the English language.

V107: 348-357, 1954. This article, "The indications for operative treatment in pulmonary tuberculosis" written by C. Semb and Sven Hjort of the Department of Surgery of the University of Oslo presents from Ulleval Sykehus, Oslo the total material and surgically treated pulmonary tuberculosis in the period 1949-1953. The differential indication between apicolysisthoracoplasty and pulmonary resection is discussed and elaborated according to experiences and results obtained from 601 thoracoplastics and 267 resection operations.

V107: 358-391, 1954. "Indications for the surgical treatment of pulmonary tuberculosis" by Tage Kjaer and Jens L. Hansen from the Department of Thoracic Surgery, Copenhagen. Conclusion: Resection still has its most clear cut indication as secondary intervention, namely as supplementary measure to collapse. As experience increases, and we are better able to avoid or to control complications, particularly by small resections, primary resection treatment following intensive mendicamentous preoperative care will surely be given con-

stantly greater room at the expense of the different collapse methods.

Acta Chirurgica Scandinavica supplement.

In the supplements the entire volume is devoted to a particular topic.

Supplement 188, 119pp. "Fracture of the Calcaneus" a clinical study with special reference to the technique and results of open reduction by Anders Wider, Dep't. of Surgery, Stockholm, Sweden.

The series on which the investigation is based consisted of 221 calcanean fractures treated from January 1944 - June 1952; 93 of them by open reduction. Extensive bibliography and excellent roentgenograms are included.

American Journal of Surgery.

V88: 431-482, 1954. "Surgical review of hand surgery" by John J. Byrnes, Diplomate, American Board of Surgery, Boston, Mass.

A very comprehensive surgical review of creative organisms, atomic localization and some general principles of treatment of infection; trauma; reconstructive surgery of the hand; vascular diseases; tumors; and painful states of the hand. Good illustrations and bibliography.

Annals of Surgery: a monthly review of surgical science and practice.

The official publication of the American Surgical Association; the Southern Surgical Association; Philadelphia Academy of Medicine and the New York Surgical Association.

V140: 2-34, 1954. From the Anesthesia Department of the Harvard Medical School at the Massachusetts General Hospital comes a "Study of the deaths associated with anesthesia and surgery; based on a study of 599,548 anesthesias in ten institutions 1948-

(Continued from Page 399)

1952 inclusive" by H. K. Beecher and D. P. Todd

Summary: All deaths occurring on all of the surgicals and surgical specialty services were examined and appraised as to cause of death by a team working in each of the participating hospitals.

- 1. A fifth of the anesthesias in these 10 university hospitals are administered by nurses. Current trend is an increase in administration by physician specialists and anesthesia residents.
- 2. Inhalation anesthesia most important technique; intravenous anesthesia has doubled in period of study; spinal technique has declined and also continuous or multiple dose techniques of spinal anesthesia.
- 3. Ether alone, or in its various combinations is used 3½ times as often as cyclopropane alone or in its various combinations.
- 4. Closed circle arrangement important but great increase in semi-open technique and great decreases in use of toand-fro filter.
- 5. Tetracaine (Pontocaine) or procaine used most and procaine for local or regional anesthesia. Sharp decline in use of dibricaine (nupercaine). Cocaine use steady for topical anesthesia but tetracaine for this purpose declined.
- 6. Introtracheal intubation used principally with inhalation anesthesia; great increase in use as an adjunct to intravenous anesthesia.

(Other surgical journals will be reviewed in the next issue.)

Mrs. Esther Howard Medical Librarian

LOCATION DESIRED

A surgeon who has finished training is looking for a location where he can have a private practice of surgery. He will be done completing a year of post-graduate study in surgery in January. Has practiced in S. D. before. For information write — Box 27, 300 1st National Bank Building, Sioux Falls, South Dakota.

ANTI-COAGULANT DRUGS-

boembolic Complications in Acute Myocardial Infarction. Proc. Staff Meet. Mayo Clinic, 23, 367, 1948.

- Wooten, R. L. and Kyser, F. A., Mortality, Morbidity and Treatment of Myocardial Infarction, Ann. Int. Med. 38, 247, 1953.
- Russek, H. I., Lohnman, B. L., Doerner, A. A., Russek, A. S. and White, L. G., Indications for Bishydroxycourmarin in Acute Myocardial Infarction. Circulation 5, 707, 1952.
- Sigler, L. H.: Letter to the Editor, J.A.M.A., 145, 1004, 1951.
- 8. Rytand, D. A., Anticoagulants in Coronary Thrombosis with Myocardial Infarction, Arch. Int. Med. 88, 207, 1951.
- Howell, D. and Kyser, F. A., The Effect of Anticoagulant Therapy upon the Development of Mural Thrombosis Following Myocardial Infarction — Ann. Int. Med. 40, 694, 1954.
- Nichols, E. S., Long Term Anticoagulant Therapy in Cardiovascular Disease: Therapeutics in Internal Medicine, F. A. Kyser, Editor, 2nd. Edition 487, Paul B. Hoeber, N. Y. 1953.

(Continued from Page 401)

MODERN DRUG-

and avoid undesirable effects. Because of biological variations, dosage is highly variable and must be adjusted by close observation of the patient rather than by reliance on the "average" dose.

The modern physician has at his disposal in our drug armamentarium weapons of remarkable efficacy against many disorders. His use of these agents to their greatest advantage will be proportional to his knowledge of their action and of the process which he wishes to modify. By being alert always to their potentialities for harm, he will avoid the inherent dangers which reside in the unguarded use of these powerful agents.

REFERENCE

Grollman, A.: Pharmacology and Therapeutics: A Textbook for Students and Practitioners of Medicine, 2nd Edition, Lea & Febiger, 1954.

DOCTOR WANTED

Our Doctor being drafted. Contact Grand Meadow Minnesota Health Association.



This is your MEDICAL ASSOCIATION

ABERDEEN DISTRICT HEARS DOCTOR JONES

Warren L. Jones, M.D., Sioux Falls, spoke on "Controversies in Cardiac Care" at the regular meeting of the 1st District Medical Society at the Sherman Hotel in Aberdeen on October 5th.

John C. Foster, Executive Secretary of the Association also discussed the possibilities of a Blue Shield Plan in South Dakota. About sixty doctors and wives attended the dinner and meeting.

BLACK HILLS GROUP HEARS DR. EVANS

The Black Hills District Medical Society, meeting at Sanator early in October, heard a paper on "The Treatment of Tuberculous Infections in Bones and Joints" by Doctor Edward T. Evans, Minneapolis.

During the business session, the District voted to cooperate in an expanded blood donor recruitment program throughout the Hills area.

THIRD DISTRICT HEARS SMITH

Doctor George Smith. Sioux Falls neurosurgeon, was the principle speaker at the 3rd District Medical Society meeting in Madison on Sep-

tember 30th.

Dr. Smith spoke on the "Classification, Signs, Symptoms and Treatment of Various Types of Brain Injury."

G. P. ACADEMY ELECTS HAGIN

The South Dakota Chapter of the American Academy of General Practice, meeting in Huron in October elected Dr. John C. Hagin of Miller as its president. Other officers are: Dr. H. J. Grau, Rapid City, vice-president, and Dr. Magni Davidson, Brookings, Secretary-Treasurer. Delegates to the American Academy are: Dr. A. P. Reding, Marion, and Dr. E. T. Lietzke, Beresford.

A symposium on diseases of the chest featured Drs. William Stead, Ivan Baronofsky, and Charles Mice, all of Minneapolis.

NEW INFORMATION ON MED. SCHOOL ENROLLMENTS

Availability of medical schools, and a high per capita income in a given area, have a bearing on the number of applicants for medical training, according to a recent survey by John M. Stalnaker, director of studies for the

Association of American Medical Colleges.

Number of colleges in the state is not necessarily related to the volume of applications it was revealed nor is the per capita income of physicians.

Various geographical areas in the country have about the same number of freshman places available in medical schools, with five per 100,000 population reported. The larger the number of practicing physicians in a state relative to population, the greater the interest in obtaining medical education, Mr. Stalnaker said.

There has been an overall decrease in the number of applicants from that of preceding years for the country as a whole.

Exceptions to the observations on income levels are the low income states of Florida, Mississippi and Arkansas, where the relative number of applicants is high, and Nevada, where income is high but the number of applicants low.

Area-wise, the Middle Atlantic states lead with 14 applicants per 100,000 population as contrasted with a national average of nine. In the analysis by states, District of

Columbia is first with 18 per 100,000, Nebraska with 17, and Utah and New York with 15.

Maine, New Mexico and Nevada, which have no medical schools, have a ratio of five students applying for each 100,000 population.

Two thirds of all freshman medical students enter schools in their own states, but many places are filled by out of state residents. University of Colorado and University of Utah draw Montana, Idaho, Wyoming, New Mexico and Arizona, which have low population density and no medical schools. Maine, Rhode Island, New Jersey and Delaware have high population density and no medical schools.

Nebraska, Utah and District of Columbia have a relatively large number of applicants accepted. At the other extreme, only eight students from Nevada applied to any medical school, and none of these was accepted.

Highest acceptance ratios were in Iowa with five out of six, North Dakota with seven out of nine, and Tennessee with five out of seven.

Much lower acceptance ratios were reported for Rhode Island, with three out of nine, Delaware with four out of nine, and New York with seven out of 15.

Sarah Counts, research associate in the association, collaborated on the study, which is explained in the October issue of the Journal of Medical Education.

NEWS NOTES

Dr. R. G. Mayer, Aberdeen, attended the North Central Section of the American Urological Association at Detroit October 6 through the 9th.

Dr. C. M. Kershner. Brookings, attended the annual Academy of Ophthalmology in New York during the week of the 19th of September.

Dr. W. W. White has reestablished his practice in Faith after a brief sojourn in McLaughlin.

Dr. Gene Lewallen has established a practice at Lennox.

Dr. Bernard Batt has left Woonsocket to accept a residency in Minneapolis.

* * *

The Mitchell District's September meeting featured a paper on "Radio-Active Isotopes" by **Dr. Warren Peiper.**

S. D. SOCIETY OF INTERNAL MEDICINE MEETS IN S. F.

The S. D. Society of Internal Medicine held a scientific program in Sioux Falls, October 20th.

Guest speakers were: M. M. Hargraves, M.D., Rochester, Minn.; L. M. King, M.D., Sioux Falls, S. D.; James C. Cain, M.D., Rochester, Minn.; Elston Huffman, M.D., Denver, Colorado and A. K. Myrabo, M.D., Sioux Falls, S. D.

T. J. Billion, M.D., presided over the panel discussion which was held at noon.

OB-GYN GROUP MEETS IN DEC.

Every phase of maternal and newborn care will be covered at the Sixth American Congress on Obstetrics and Gynecology, to be held in the Palmer House, Chicago, December 13-17.

The five-day meeting, which is expected to draw an attendance of about 3,500, will be under the sponsorship of The American Committee on Maternal Welfare, Inc., and The American Academy of Obstetrics and Gynecology.

The program, designed for physicians, nurses, public health officials and hospital administrators concerned with mother and baby care, will include approximately 30 formal papers, 22 symposia and panels, luncheon discussion groups and round-table discussions. Scientific and technical exhibits will present the latest developments in the field.

HOME TOWN VA CARE CHANGE DESCRIBED

Dr. Joel T. Boone, Chief Medical Director of the V.A. has asked doctors providing home town medical care to observe a new pre-requisite for therapy in malaria cases. His statement follows:

"In order that the diagnosis of malaria be more accurately documented, especially for treatment and other VA benefits, the following procedure will pertain:

Whenever possible, VA fee basis physicians will procure blood smears prior to rendering treatment to a veteran for suspected malaria. Specific treatment will depend upon the blood smear being positive for the malaria parasite. The physician will forward all positive blood smears to the VA Outpatient Clinic having jurisdiction of the veteran's record where they will be preserved for one year."

ATLANTIC CITY MEETING AMERICAN MEDICAL ASSOCIATION June 6-10, 1955

The Council on Scientific Assembly announces the deadline for those who wish to participate in the Atlantic City Meeting, either by reading a paper or presenting a scientific exhibit.

DEADLINE FOR SECTION PAPERS. **DECEMBER 15, 1954** DEADLINE FOR SCIENTIFIC EXHIBIT, JANUARY 10, 1955

Applicants should communicate with the Secretary or the Representative to the Scientific Exhibit of the Section in which they are interested. Further information may be obtained from the Secretary, Council on Scientific Assembly, American Medical Association, 535 North Dearborn St., Chicago 10, Ill.

REHAB MEN ELECT IN D.C.

At the 32nd annual scientific and clinical session of the American Congress of Physical Medicine and Rehabilitation held at the Hotel Statler, Washington, D. C., September 6-11, 1954, the following officers were elected:

President -- William D.

Paul. M.D., Iowa City President-Elect — Howard A. Rusk, M.D., New York First Vice-President-Gordon M. Martin, M.D., Rochester, Minn. Second Vice-President -A. B. C. Knudson, M.D., Washington, D. C. Third Vice-President -Donald L. Rose, M.D., Kansas City, Kan. Fourth Vice-President -Arthur C. Jones, M.D., Portland, Ore. Fifth Vice-President -Frederic J. Kottke, M.D., Minneapolis, Minn. Secretary -- Francis Baker, M.D., San Mateo, Calif. Treasurer — Frank H. Krusen, M.D., Rochester, Minn.

Executive Director — Walter J. Zeiter, M.D., Cleveland, Ohio

Executive Secretary — Dorothea C. Augustin, Chicago, Ill.

To serve on the Editorial Board of ARCHIVES OF PHYSICAL MEDICINE AND REHABILITATION. the official journal of the Congress and Society, Doctor Earl C. Elkins of Rochester. Minnesota was re-elected to succeed himself. Doctor William Bierman of New York City was elected to serve for a period of seven years.

The highest honor the American Congress of Physical Medicine and Rehabilitation can bestow upon an individual whose accomplishments in the field of physical medicine and rehabilitation have been outstanding in nature and have resulted in raising the discipline of the specialty to a higher standard is the Gold Key. This award was given to Doctor George Morris Piersol, Dean of the Graduate School of Medicine at the University of Pennsylvania.

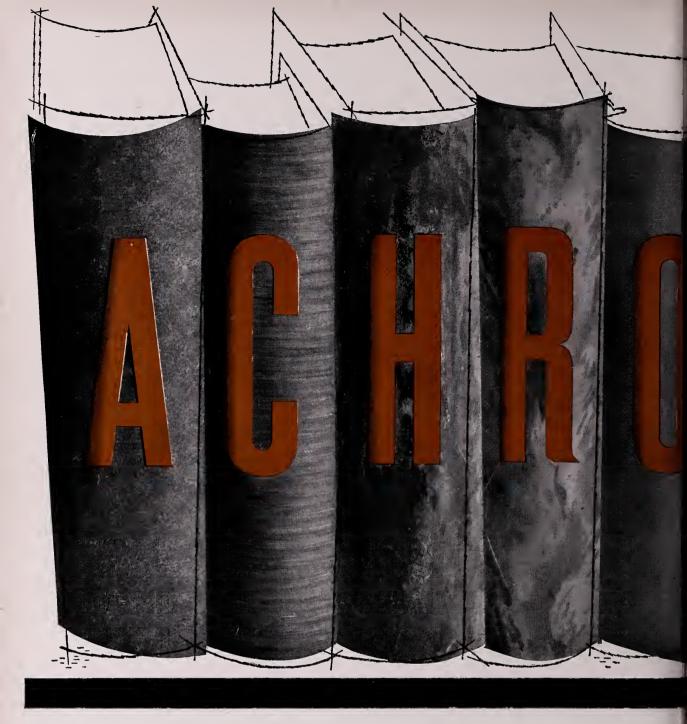
U. OF FLORIDA TO HOLD SEMINAR

The ninth annual University of Florida Midwinter Seminar in Opthalmology and Otolaryngolov will be held at the Sans Souci Hotel in Miami Beach the week of January 17th, 1954. The lectures on Opthalmology will be presented on January 17th, 18th, and 19th and those on Otolaryngolgy on January 20th. 21st. and 22nd. A midweek feature will be the Midwinter Convention of the Florida Society of Ophthalmology and Otolaryngolgy Wednesday afternoon, January 19th, to which all registrants are invited. The registrants and their wives may also attend the informal banquet at 8 p. m. on Wednesday. The Seminar schedule permits ample time for recreation.

The Seminar lectures on Opthalmology this year are: Dr. William F. Hughes, Jr., Chicago; Dr. Phillips Thygeson, San Jose; Dr. James Allen, New Orleans; Dr. Walter H. Fink, Minneapolis; and Dr. Milton L. Berliner, New York. Those lecturing on Otolaryngology are: Dr. Paul Holinger, Chicago; Dr. Lawrence R. Boies, Minneapolis: Dr. Edmund P. Fowler, Jr., New York; Dr. Arthur W. Proetz, St. Louis and Dr. David D. DeWeese, Portland, Oregon.



HAROLD S. BAILEY, PH.D.
EDITOR
Division of Pharmacy
College Station, South Dakota



Medical history is being written today





 $\begin{array}{c} {\bf Hydrochloride} \\ {\bf Tetracycline} \ {\bf HCl} \ {\it Lederle} \end{array}$

The introduction and rapid widespread adoption of Achromycin has opened a new chapter in the history of broad-spectrum antibiotics.

ACHROMYCIN fulfills the requirements of the ideal antibiotic in virtually every respect . . . wide-range antimicrobial activity, *in vivo* stability, tissue penetration, minimal toxicity.

ACHROMYCIN is truly a broad-spectrum weapon, effective against Gram-positive and Gram-negative

bacteria, as well as certain mixed infections.

ACHROMYCIN is more stable and produces fewer side effects than certain other broadspectrum antibiotics.

ACHROMYCIN provides prompt diffusion in body tissues and fluids.

ACHROMYCIN is destined to play a major role among the great therapeutic agents.



THE PROFESSION OF PHARMACY AND THE FOOD, DRUG, AND COSMETIC LAWS*

Joseph H. Goodness**

Is pharmacy a profession or a trade? This question does not arise from vanity, but as a result of serious upheavals in pharmacy.

Perhaps the answer and its significance to society can be obtained if we first answer the question: What makes a profession a profession?

If the reader will analyze any calling which is admittedly a profession and also analyze pharmacy concurrently, he will observe the following common characteristics.

First, a professional body can be looked at as a structure, an entity, a unified segment of general society. As such an entity a "profession" is composed of a number of persons united by a unique interest or activity into a common fold. Pharmacy answers these structural requirements, but so do many other groups and organizations that are conspicuously not professions. These non-professions may be exemplified by such activity-minded groups as honest laborers, veterans' organizations, the Red Cross, mountain climbers, and others. Each group has its laudable purpose or interest, yet is not a profession by virtue of its internal structure alone. Something more than structure and activity is required for a profession to be distinguished from other types of calling and organizations.

A profession must, therefore, look for its

*A summary of a paper, "The Profession of Pharmacy and the Rules of Society, Ethics, and Law," presented before the A.Ph.A. Section on Education and Legislation, Salt Lake City, August 1953. **Ph.G., B.B.A., LL.M., Professor of Pharmacy Admirate the All School of Pharmacy Admirate the Physics of Physics of

ministration, Massachusetts College of Pharmacy, Boston. identity not only in what it professes and does, but also in those to whom that professing is directed, and whether or not that which is professed is accepted and rewarded.

Briefly, a profession exists by virtue of an implied compact between itself and general society. In this compact or implied agreement the profession professes its ability to perform and its willingness to accept as its never ending obligation to society the following duties:

- 1. The duty of providing to the members of society, a continuous, adequate, and efficient specialized service, without discrimination, greed, or betrayal of confidence.
- 2. The duty of providing such quality and quantity of materials as may be required to perform the service. This is particularly true if a potentially harmful material is used, which cannot be identified or evaluated by the layman user.
- 3. The duty of continually searching for, collecting, and using new professional knowledge, even should such knowledge have the effect of lessening or eliminating the need of the profession by society.
- 4. The duty of recruiting new members for the profession and of providing them with encouragement and education. The distant objective is the preparation of these recruits for the service of future generations of society.
- 5. The duty of preserving itself as a profession, as an effective organization, and as an instrument of society so long as there

remains a need for the services of the profession by society. This may involve self policing, and when necessary, political action.

Pharmacy has dedicated itself to these objectives, and thus has qualified itself as a potential profession. But it is true that a one-sided dedication, though it may create obligations for the dedicated, cannot create rights. Therefore if a profession is to be recognized, it must have special rights granted to it by general society. These special rights counterbalance the special obligations.

Should society demand the fulfillment of obligations without the grant of counterbalancing rights, slavery would be the result. The principle that slavery is not a self perpetuating social institution with slaves applies with equal force to individuals and professions. Such special rights as general society does grant to a profession become the prerogative of that profession, and the loss of the prerogative destroys the profession.

Therefore, to benefit the members of society, society has always granted the following special rights to professions, none of which it must be noted are purely economic rights, for economic rights are universal.

- 1. The right to a legal recognition as an entity and the acceptance and recognition of the profession as an instrument of society.
- 2. The right to exercise unhampered judgment in the technical aspect of its work without governmental or other limiting authority. This right includes the right to search for truth, to create its own technical language, its own symbols, and its own procedures.
- 3. The right to be protected by special laws creating a circumscribed professional monopoly for professional work and obligations.

By these or any other tests the inescapable conclusion is that pharmacy is a profession, and that its professional services are essential to society's existence.

There has never been an age nor a society in which pharmacy, by whatever name it was known, has not enjoyed these special rights as a reward for the performance of its special obligations. And it is a positive certainty that because of the essential nature of the services of pharmacy, no society can grow and prosper without the professional contributions of pharmacy in man's endless fight against nature in the form of pain, disease, and untimely death.

It is against this background of social structure that we should examine several current problems of the profession of pharmacy, each of which has been created by fairly recent laws.

FDC Law Created Problems

Most of these problems have arisen from the provisions of the Federal Food, Drug, and Cosmetic law. Particularly from those provisions which are applicable to the prescription practice of retail pharmacy, and the methods and means used to enforce these provisions.

The history of this law reveals a series of small errors and misconceptions which collectively have created an unworkable law when applied to a profession. The federal law has failed to recognize that prescription work is professional work. The error, more specifically, is the failure to recognize the existing distinction between the mass production of drugs (which is a proper subject for rigid legal controls) and the dispensing of drugs to patients, which has so many varied and changing requirements that any rigidity imposed by law must by the nature of things cause irreparable harm to some patients. It is a basic truth that for efficiency and public safety prescription work should be left to professional judgment within broad legal requirements rather than be placed under minutely definitive federal statutes and regulations. The failure to understand or to appreciate this truth led to the inclusion in the federal law primarily intended to regulate mass production of drugs, of the control of prescription-dispensing of drugs. The control of prescription work has always been a state matter. Although the record reveals that there was an intent of Congress to exempt prescription drugs and work, the wording of the original Section 503 (b) was such that non-professionally trained persons of the enforcement authority could and did read into the statute a meaning to regulate prescription practices. The confusion which resulted is too recent and vivid to need recounting. In an attempt to rectify the harm, the statute was amended by the Durham-Humphrey amendment, which in its final form proved to be a treatment of some of the symptoms rather than a cure. The basic deficiencies and harm of the original interpretation are still the law of the land.

Perhaps the most frequently encountered harmful result to pharmacy is the effect of the needless reversal of a common practice of physicians and pharmacists. For a century at least a physician who desired to limit the supply of a drug to a patient indicated that fact by a notation on the prescription. The pharmacist obeyed that request without question. The absence of a limiting notation on the prescription was universally understood to mean that a permission to refill the prescription upon the patient's request would be honored by the pharmacist, within the bounds of professional ethics and obligations. Never has pharmacy tried to sell prescription drugs except upon the request of the doctor of the patient. Drugs have never been merchandisable items in pharmacy. These pharmacy practices are so inviolable that even today most physicians still adhere to the old practice of prescription writing and intent; but the federal law has placed a new and directly opposite meaning on a prescription bearing no notation concerning refilling. Today such a prescription which calls for any important drug, and some not so important, is not refillable except upon specific authorization of the prescriber.

If the only result of this provision were to assure to the doctor his right to control the medication of his patients, no problem would arise; for such right was, is, and always must be left to the practitioner's professional judgment. But since four out of five prescriptions, as now written, still bear no notation as to refilling, and since the law specifies that this means that no refilling is permitted, the pharmacist may not refill the prescription without the doctor's consent, no matter how urgent the need or how harmful the consequences to the patient from the lack of continued medication. The federal law has abolished the right of the pharmacist to exercise a necessary professional judgment in emergency situations. Under the law the pharmacist is treated as a merchant, and nothing more; yet he must stand the urgings, pleas, and abuse of patients which rightfully should be directed to the physician or the law, when he complied with the requirements of the law. There are other evils created by this provision, some of which are these:

- 1. The price of drugs in refilled prescriptions is increased by the cost of time and telephone charges. Economic rules make this so.
- 2. The doctor who is unethical is enabled by this law, merely by omitting the refilling notation to place the patient in a "captive patient" status and to subject him to additional fees for continued treatment. It is the law which creates the "captive patient" status for the unethical or the forgetful doctor. The law thus compels the patient to buy and rebuy a right to health.
- 3. The thus-elevated cost of professional medication drives some patients to self medication, which too frequently may be slow or ineffectual with a resulting loss to the patient and the nation.
- 4. The confusion and suspicion created by the inequities in the law disrupt a cooperating health team with needless damage to all.

While it is not the purpose of this paper to discuss the physician's problems, we cannot refrain from asking at least one question this law raises: Is the physician liable in civil action for damages if the patient is damaged by the non-availability of necessary continued medication because the physician was not available for authorization when refilling was needed or when the doctor refused to grant such authorization? In such a case the law protects the pharmacist for refusing to refill the prescription, but he is not protected from the accusations that the public will make for his failure to provide help which was within his physical power to render, nor will it protect him from a troubled conscience if the patient is injured or dies for lack of the drug.

Federal Law Class Legislation

Whether by intent or accident, the federal drug law is class legislation which favors the medical profession unduly at the expense of pharmacy and the patient. The law develops this fault by the following means: All drugs are classified into four groups: 1. as new or experimental drugs, 2. as habit forming drugs, 3. as potentially harmful drugs, and 4. as drugs safe for self medication use. The sale of the fourth class of drugs is not restricted by the law; but the first three classes of drugs

may legally reach the patient only through the doctor or through retail pharmacy on a prescription. The declared objective of the law is safety for the patient; and because the assumption is that these three classes of drugs are dangerous, it is assumed that safety for the patient and the public is to be attained only by a strict adherence to the letter of the law. The law, thus, undertakes to establish by statute a duty which the profession has pledged and practiced for centuries. That the federal law is failing in its declared purpose and is actually decreasing public safety and must continue to fail, is easily seen in the following facts:

- 2. Such success as the federal food, drug, and cosmetic law claims to have produced in prescription practice is in reality due, not to the law, but to the professional behavior of doctors and pharmacists acting under their ancient professional codes.
- 2. The provisions of the law concerning drugs places absolutely no restriction of any kind on the physician, who may administer or sell drugs as he pleases, whether for medical or economic ends. This partiality of the law has encouraged the unethical physician to operate retail "prescription clinics" in direct competition with, or rather replacement of pharmacy. The unethical physician enjoys immunity from the restrictions of the law, from prescription refilling limitations, from labeling requirements, from record keeping, and from harassment of enforcement officials. And the patient he serves with drugs, by the operation of the law, are forced to surrender their right to evidence of malpractice of the doctor should harm result from error. How this can be thought to advance public health or safety is a mystery. Further, there is no logic in allowing the selling of dangerous drugs by one-man action when a second-man check for safety and accuracy by a pharmacist is the normal tried and proved professional health practice.
- 3. The law makes no allowance for supplying drugs in an emergency. All effective drugs are restricted to prescriptions, always. The incurably ill, the victims of fire, flood, tornado, explosion are legally condemned to suffering or death by this law if no physician is available; for professional judgment by the pharmacist has

been completely obliterated by this oversight in the law. By the law, pharmacy has been disfranchised in the matter of all effective drugs needed in an emergency. A pharmacist must now serve in an emergency only at his own peril and upon a prior personal decision to accept a fine or imprisonment for his humanitarian efforts, if apprehended. By this law emergency drugs are now available only from "criminals."

The recent apologetic announcement of an informed official that no convictions will be sought for such emergency aid **does not change the law** and is neither assurance to a disfranchised profession nor a guaranty against harassment by inspectors nor conviction by the courts, for they apply only the law.

4. The third class of drugs (those having a "potentiality for harmful effect") is, strangely, identified only by a vague definition. No list or provision for a list of specific drugs is available as a guide. The legal consequence is that a pharmacist must be an absolute insurer or guarantor in handling drugs. Once a drug is classified as harmful by enforcement authority, it becomes such in all dilutions or concentrations, in all doses, in all patients, at all times, and under all circumstances. In reality the test of "harmful effect" is abandoned and enforcement proceeds on the basis of the identity of the drug alone rather than on the safety in use. The constitutionality of this law is seriously questioned.

It is axiomatic that a bad law cannot be made good by aggressive enforcement. Acts which society has acknowledged as necessary, and which are demanded from pharmacy should not and cannot be evil because an ill considered law prohibited them, and because convictions under such law are being accumulated on the record. Yet all these things are taking place in pharmacy today.

The aggressive enforcement has taken on questionable forms. For example it is repeatedly reported that inspectors posing as sick people present counterfeit prescriptions for filling, then seek refilling. Most reasonable arguments and heart moving appeals of the "sick" are directed to the humanitarian and professional principles of pharmacy. And should the sale be made, an arrest follows.

Only the letter of the law and the economic fact of a sale, form the basis of the crime. Professional or ethical issues are not the concern of the enforcement authorities nor the courts, for they look only to the law. What further evidence is required by society to conclude that the law must be changed?

The evils of the federal law have been multiplied by state duplication of the federal law and by the methods of enforcement. Some states operate under a copy of the 1938 law while others have duplicated the amendment. The result is confusion. During this confusion the legal control of prescription practice has, in some states, passed from the board of pharmacy to that of public health or to some non-professional or non-pharmacy board. And for their own security many retail pharmacists have abandoned their professional obligations and retreated to the safe practice of acting as mere merchants: a physical product for a price. That such an ignoble retreat from professionalism emboldened grocers and others to also handle drugs is not surprising nor unexpected in an economic

It is the considered opinion of thoughtful pharmacists and others that Section 503 (b) of the federal Food, Drug, and Cosmetic law requires either elimination or drastic revision. It is equally clear that other immediate corrective measures must be instituted to reverse the present trend of governmental action, which, if continued, will almost certainly

demoralize the health professions. These recommendations are as follows:

- 1. Professional pharmacy must be given representation on the policy making level of the drug administration.
- 2. The food and drug administration must desist from its attempt to extend the law into prescription practice by irrational and illegal interpretation of an admittedly deficient law.
- 3. The food and drug administration must cease its unrealistic and wrongful attacks upon the entire profession of pharmacy. The arguments it uses are based on the sometimes justifiable convictions of a very few unethical people in the profession whose conviction could have occurred under state laws with less fanfare and damage.
- 4. Individual states proposing changes in their drug laws must look to the needs of their people rather than to the federal law for a guide.
- 5. Pharmacy, if it is to continue as a profession, must unite in its demand for the restoration of rights granted by society, for the alternative, which is surrender of its professional obligations, is unthinkable.
- 6. Each pharmacist, which means you, the reader, must do his small part to eliminate the fear and frustration that has become an ingredient of every prescription we fill or refill today.

HELP WANTED

"Your support earnestly solicited." This is a phrase appearing quite frequently now that the political season has arrived. Your editor uses it with no less fervor than the most ambitious candidate. The Pharmacy News page of this Section of the Journal needs your support.

For sometime now this page has carried college of pharmacy, state and national news, with only a few items of personal interest about pharmacists of South Dakota. Since

we have heard nothing to the contrary, we still think you would like to hear about the various pharmaceutical and personal doings of your classmates and friends.

Since there is no reporting staff for the Journal, we rely on your help entirely for news items. A postcard addressed to Editor, Box 675, College Station, South Dakota, is all that is necessary. May we count on at least one news item from you during the year?



THE LEGAL EFFECT OF THE 1954
AMENDMENT TO THE FEDERAL
NARCOTIC LAW
(THE SO-CALLED CODEINE ACT)
By Herman S. Waller—N.A.R.D.
General Counsel

The Harrison Federal Narcotic Act, as well as the Uniform State Narcotic laws, paraphrased, briefly provides that a dealer who is registered in accordance with the Federal Narcotic Act may dispense narcotic drugs to a consumer on a written prescription issued by a practitioner who has been similarly registered as required by the Harrison Federal Narcotic Act, provided such prescription is dated as of the day it was signed by such practitioner, and when such prescription is preserved by the dealer for a period of two (2) years.

The 1954 amendment of the Harrison Federal Narcotic Act, briefly stated, provides that, in lieu of the requirement of a written prescription for the dispensing of certain narcotic drugs and compounds, the Secretary of the Internal Revenue, or his delegate, may in his discretion, after considering the views of the various bureaus, professional groups and state enforcement agencies, find and by regulation designate certain narcotic drugs and compounds to possess relatively little or no addiction liability, and provide that the dispensing of such drugs or compounds may be made by a dealer to a consumer upon the oral prescription of a duly registered practitioner, providing such oral prescription is promptly reduced to writing by the dealer, and by him preserved in like manner as though it were a written prescription.

In issuing an oral prescription the prescriber shall furnish the dealer with the same information as is required by law in the case of a written prescription for narcotic drugs. The dealer, except for the written signature, shall handle such writing of an oral prescription in the same manner as is provided by law in case of the handling of written prescriptions for narcotic drugs.

An oral prescription for narcotic compounds cannot be refilled.

With respect to the 1954 amendment to the Federal Narcotic Act, it is important to note that the permission to accept and handle oral prescriptions for heretofore regarded habit narcotic drugs and compounds will apply only to such drugs and compounds which have been designated by a special ruling by the Federal Narcotic Commissioner, after compliance with the procedures provided by the 1954 Amendment to the Act. Also to be noted is the fact that the 1954 Amendment provides that subsequent to the issuance of a regulation permitting oral prescriptions for certain narcotic drugs and compounds, if experience reveals abuses of the procedure, the Secretary through his delegate, by regulation, may rescind his former determination.

The immediate concern of the State and Metropolitan Association Secretaries with respect to a regulation when so issued by the Federal Narcotic Commissioner, in pursuance to the 1954 Amendment to the Narcotic Act, is the conflict of such regulation with the provision and enforcement of the State's uniform Narcotic Act. With respect to this problem, it is to be noted that in general a Federal law supersedes a state law in a field of legislation which the Federal government has taken over. However, in the field of public health, morals, and welfare, a state law prevails when it is not in conflict with federal statutes on the same subject (that is, when the provisions of the state law are not weaker).

The problem for immediate consideration then is, what should the State and Metropolitan Secretaries do right now to correlate the rulings of the Federal Narcotic Commissioner with the provisions of the State laws? The safest procedure is to amend the state law to correspond with the Federal law in order to provide for uniform enforcement. Another possible procedure is to obtain, where the state laws so provide, a state's Attorney General's ruling which in effect adopts the Federal regulations in the enforcement of the State law.

To make available sooner the effective benefits of the 1954 Amendment to the Harrison Federal Narcotic Act, state and metropolitan pharmaceutical association secretaries should therefore immediately, first ascertain the possibility of obtaining a ruling from their respective state attorney general which ruling may implement the new regulations (when and if issued) as far as it concerns the enforcement of a state narcotic act, and if that is not possible, immediate efforts should be made to amend the state narcotic act in line with the 1954 Amendment to the Harrison Federal Narcotic Act.

In amending a State Uniform Narcotic Act, it is important to avoid opening its provisions to controversial issues. A practical amendment should merely say that "in order to accomplish effective uniform enforcement of this act, the rules and regulations of the Federal Narcotic Commission, promulgated from time to time, shall become the rules and regulations of the state's enforcement agencies of this Act."



SURITAL SODIUM IN RECTAL FORM

Description: A new form of the anesthetic Surital Sodium for rectal instillation in children and adults.

Indications: The advantages of rectal instillation of surital sodium are:

- 1. May be given in patient's hospital room.
- 2. Avoids patient's apprehension of operating room.
- 3. Patients, particularly children, may go to sleep and awaken later in their room with no unpleasant memories.
- 4. Improves induction with inhalant anesthetics.
- 5. Minimizes laryngospasm and bronchospasm.
- 6. Adaptable to many painful examinations or short operative procedures.
- 7. Decreases post anesthetic nausea and comiting frequently found with inhalant anesthetics used alone.

Dosage: Surital usually is recommended for rectal instillation in solutions of 5 or 10 percent. However, the dosage should be individualized for the patient.

Young children, active or anxious adults, or patients with hyperthyroidism may need larger than the usual dose.

Use of Rectal Surital does not require a cleansing enema. However, Parke-Davis said, the patient care in the operating room or during recovery can be decreased if evacuation is completed before anesthesia.

After rectal instillation, anesthesia occurs usually in 5 to 15 minutes causing sleep that is quiet and normal. Rate of recovery from Surital depends on the individual patient and the amount of anesthesia given, but most patients awaken within five minutes

after the last injection.

How Supplied: Surital Sodium for Rectal Instillation is supplied in 1.5 Gm. and 3.0 Gm. vials as a non-sterile product to which a green dye has been aded to distinguish it from the intravenous form. Solutions may be prepared with Physiologic Sodium Chloride Solution or distilled water, particularly in areas where tap water makes a cloudy solution.

Source: Parke-Davis and Company

SERFIN

Description: Serfin is the pure crystalline alkaloid reserpine isolated from Rauwolfia Serpentina and having the hypotensive and tranquilizing effect of the whole root. Because it is a single alkaloid, uniform potency is assured and accurate dosage is attainable.

Indications: Useful in the treatment of the elderly arteriosclerotic patient in whom the use of hexamethonium and other potent hypotensive agents may not be available. The tranquilizing and sedative effects of the compound are also of value in the geriatric patient to relieve the mental tensions so often prevalent.

Compared with other hypotensive agents, side reactions from the pure alkaloid reserpine are generally mild.

Dosage: The average inital dosage of Serfin is one tablet three or four times daily for two or three weeks. If hypotensive response is adequate after this period, reduced dosage may be tried. Some patients may continue to show adequate response to a dosage reduced to two tablets daily.

How Supplied: Scored tablets, each containing 0.25 mg. reserpine in bottles of 100 and 500.

Source: Parke-Davis and Company.

INTRAVENOUS DIAMOX

Description: An intravenous form of Diamox, the non-mercurial diuretic, primarily intended for patients unable to take oral medication.

Indications: Diamox increases the output of water and salt from the kidneys, even when the heart is weakened. It does this by inhibiting the action of the enzyme carbonic anhydrase.

For use in treating edema due to congestive heart failure.

See This Journal Vol. VI, No. 12, 366 (Dec. 1953) for more information.

Dosage: The normal dose (250-375 mg.), given once daily or every other day, has kept patients edema-free for periods in excess of a year.

How Supplied: In 500 mg. vials for 5 cc. aqueous solution. Diamox will remain stable in solution at room temperature for four days.

Source: Lederle Laboratories Division, American Cyanamid Company.

CAMOFORM

Description: A new synthetic organic highly effective in the treatment of amebic dysentery. The drug is not yet generally available.

Indications: Clinical reports (Barrios, H., Gastroenterology 27:81, 1954 and Rivero, J. M. B., Medicus June-July, 1954) and laboratory tests indicate that the drug shows promise as an orally effective amebicide against both intestinal and extraintestinal (liver, chest and glands) amebiasis. This is especially valuable because no single drug available to date gives satisfactory results against both types of amebiasis.

Laboratory studies indicate camoform may have prophylactic action against amebic infections since the drugs tends to remain in the tissues for long periods of time.

Camoform has a low order of toxicity and is relatively inexpensive, which increases its potential value in mass treatment in tropical climates.

Source: Manufactured by Parke-Davis and Company, the drug is still in the clinical evaluation stage and not generally available to the medical profession.

AMBENYL

Description: A preparation for the relief of

coughs due to colds or which have all allergic origin.

Featuring a pleasing black-cherry taste, each fluid-ounce of Ambenyl contains these active ingredients: for antispasmodic and antihistaminic effects, 56 mg. Benadryl hydrochloride and 24 mg. Ambodryl hydrochloride; for thinning mucous secretions, 8 gr. ammonium chloride and 8 gr. potassium guaiacolsulfonate; for quieting the cough reflex, 1/6 gr. dihydrocodeinone bitartrate; and menthol for soothing effect.

Indications: The new cough mixture reduces cough paroxysms, thins clogging mucous secretions, decreases bronchial spasms and bronchial congestion, and alleviates allergic symptoms.

Dosage: The recommended dosage of Ambenyl for adults is 1 to 2 teaspoonfuls every three or four hours; and for children, ½ to 1 teaspoonful every three or four hours.

How Supplied: Ambenyl is supplied in 16-ounce and gallon bottles.

Source: Parke-Davis.

PIFC ADDED TO GERIATRIC PRODUCTS

Description: Purified Intrinsic Factor Concentrate (PIFC) has been added to three of Lederle's geriatric products, Gevral, Gevrine and Gevral Protein.

Intrinsic factor has been recognized for many years as necessary for the body's utilization of vitamin B_{12} . The factor is in the gastric tissue of animals and PIFC is its most purified form.

Vitamin B_{12} and the intrinsic factor combine to form the hematinic factor which helps blood build hemoglobin. Low hemoglobin is frequently a prime problem with the geriatric patient.

How Supplied: Gevral and Gevrine come in capsule form, the first in bottles of 30, 100, 250 and 1000, the latter in 100's and 1000's. Gevrl Protein, a powder, is packaged in ½ lb. jars and 5 lb. cans.

Source: Lederle Laboratories.

ABDOL WITH MINERALS

Description: Abdol With Minerals combines in capsule form 10 vitamins and 11 minerals.

Each Abdol With Minerals capsule contains 50 mg. vitamin C, 2.5 mg. vitamin B_2 , 1 mcg. vitamin B_{12} , 0.5 mg. vitamin B_6 , 2.5 mg. vitamin B_1 , 20 mg. nicotinamide, 5,000 units vitamin A, 1,000 units vitamin D, 2.5 mg. calcium pantothenate, 0.1 mg. folic acid,

0.15 mg. iodine, 1 mg. manganese, 0.1 mg. cobalt, 5 mg. potassium, 0.2 mg. molybdenum, 15 mg. iron, 1 mg. copper, 0.5 mg. zinc, 1 mg. magnesium, 44 mg. calcium and 34 mg. phosphorus.

Indications: The company pointed out the new product is for use in prophylaxis and the treatment of multiple vitamin and certain mineral deficiencies.

Dosage: The recommended dosage of Abdol With Minerals is one capsule daily for prophylaxis. For active adults, older adults, teen-agers, adolescents, convalescents, pregnant or lactating women, or for those persons with definite vitamin deficiency states, the dosage is two or more capsules daily as determined by the physician.

How Supplied: The new capsules are supplied in bottles of 100 and 250.

Source: Parke-Davis and Company

AMPHEDASE WITH PHENOBARBITAL

Description: A combination of 2.5 mg. of damphetamine sulfate, 25 mg. of nicotinamide, 5 mg. of thiamine hydrochloride, 50 mg. of ascorbic acid, 300 mg. of Taka-Diastase and 16 mg. of phenobarbital.

Indications: Claimed to be especially helpful in depressing the appetite of obese patients without stimulating the central nervous system. The phenobarbital minimizes the stimulation of the CNS which may be obtained from the dextroamphetamine content.

Dosage: The recommended dosage is one Kapseal about 30 minutes before meals daily. If the desired response of the patient is not obtained, each dose may be increased to two Kapseals. Individualization of dosage should be anticipated.

How Supplied: Bottles of 100 and 500 capsules.

Source: Parke-Davis and Co.

CEBENASE

Description: Tablets containing Intrinse (B-12 with intrinsic factor), ascorbic acid, folic acid, thiamine riboflavin, pyridoxine, calcium pantothenate and nicotinamide.

Indications: Administered orally for treatment of vitamin C and B deficiencies and in stress of acute illness or recovery from injury.

How Supplied: Bottles of 50 tablets.

Source: The Upjohn Company.

ILOTYCIN DROPS

Description: An Ilotycin (Erythromycin-Lilly) preparation for infants and every young children.

Indications: Clinical reports show that more than 96% of acute bacterial infections of the respiratory tract respond to Erythromycin and more than 80% of all bacterial infections seen in medical practice respond to its effect.

Dosage: For children, the average dose is 5 mg. (1 drop from the special dropper) per pound of body weight every six hours. 'Ilotycin' Drops may be given directly on the tongue and washed down with a little milk or water.

How Supplied: Each package consists of the special dropper and a bottle containing 1 Gm. of Ilotycin' as the crystalline ethyl carbonate in a dry mixture. At the time of dispensing, 6 cc. of water is added to provide 10 cc. of the pale-orange-colored suspension.

Source: Eli Lilly and Company, Indianapolis.

ILOTYCIN OTIC

Description: A preparation consisting of Ilotycin (Erythromycin, Lilly), Polymyxin B sulfate, and benzocaine intended for the treatment of a wide variety of ear infections.

Indications: Otic 'Ilotycin' provides a highly concentrated medicament with a very wide antibiotic spectrum, since 'Ilotycin' is especially effective against gram-positive bacterial infections, while polymyxin B is potent in treating gram-negative bacterial infections.

Pain, burning, and itching are relieved by the benzocaine, a rapid-acting topical anesthetic with prolonged effect.

Otic 'Ilotycin' is recommended for use in the great majority of infections of the external ear. These include all three of the broad categories of external ear infections — the dry type with scaling and fissures; the wet, "weeping" type; and furunculosis.

Dosage: Three to four drops should be instilled into the external auditory canal of the infected ear three or four times daily.

The solution is stable for thirty days without refrigeration.

How Supplied: Otic 'Ilotycin' is offered in a package which includes as separate units:

- 1. One bottle containing 25 mg. 'Ilotycin' (as the glucoheptonate).
- 2. One bottle of diluent containing 50,000

units polymyxin B (as the sulfate), with benzocaine, 5 percent, in propylene glycol.

3. Dropper assembly.

At the time of dispensing, the liquid portion is added to the 'Ilotycin' to make 5 cc. of solution.

Source: Eli Lilly and Co., Indianapolis.

YUVRAL

Description: A vitamin-mineral concertrate prepared especially for youths and active adults.

Indications: The minimum daily requirements of many vitamins and minerals are so much greater during periods of growth, that a special vitamin-mineral concentrate is very often needed by this age group.

Vitamin B_{12} and Purified Intrinsic Factor Concentrate are present in larger amounts than in geriatric preparations, as are vitamin A and calcium.

Dosage: The normal dose of Yuvral is one capsule daily.

How Supplied: Bottles of 30, 100 and 1000 capsules.

Source: Lederle Laboratories Division, American Cyanamid Co.

BRUCELLA ABORTUS TUBE ANTIGEN

Description: A tube agglutination test for the laboratory diagnosis of human Brucellosis prepared and tested according to the recommendations of the committee on Brucellosis of the National Research Council.

The Committee has proposed the adoption of two measures in order that more uniformly consistent, comparable and reliable agglutination test results may be obtained in various laboratories throughout the country. First, that a standard antigen, prepared from a designated stable strain of Brucella abortus be used in all instances. Second, that a uniform procedure of conducting the tube agglutination test is utilized by all laboratories. Brucella Abortus Tube Antigen Lederle has been prepared to meet these requirements.

How Supplied: Available in 5 and 25 cc. vials. **Source:** Lederle Laboratories.

'NEOSPORIN' ANTIBIOTIC OINTMENT OPHTHALMIC

Description: Each gram contains 'Aerosporin' Sulfate Polymyxin B Sulfate 5,000 Units, bacitracin 400 Units, neomycin sulfate 5 mg. in a special low-melting point petrolatum base.

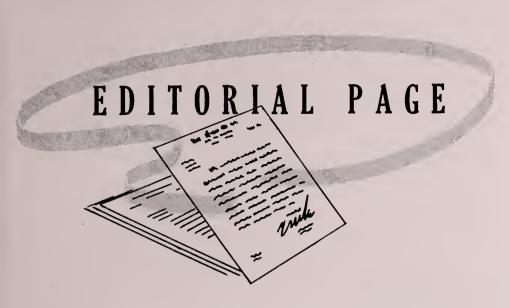
Action: The spectra of the three antibiotics overlap in such a way as to provide bactericidal action against virually all bacteria, including Pseudomonas aeruginosa, causing or contaminating eye lesions. Susceptible bacteria rarely develop resistance to these antibiotics. Development of sensitization, by the patient, to these antibiotics is also rare.

Indications: All bacterial infections of the eye, whether primary or secondary. Also indicated prophylactically to protect clean wounds. When applied to the eyes and lids for several days before surgery, 'Neosporin' reduces the bacterial flora and does much to provide a sterile field.

How Supplied: Tubes of 1/8 oz. with opthalmic tip.

Source: Burroughs Wellcome & Co.

"Isn't that a terrific campaign that Julius Schmid is promoting to create a new prophylactic market? I just finished reading the details in their ad in **Drug Topics**. Their new Trichomonal Re-Infection Control program for doctors is already sending new customers into my store for XXXX FOUREX, (R) RAMES, (R) and SHEIK. (R) Believe me, it's a pleasure to cooperate with them."



GG AVAILABLE ON PRESCRIPTION

Poliomyelitis Immune Globulin (Human) has been released to the usual drug marketing channels by several pharmaceutical manufacturers. Previously, this product had been allocated by the Office of Defense Mobilization to local health departments for use in epidemic areas only.

While it will be labeled "Poliomyelitis Immune Globulin," the serum will be the same as physicians have used in the past for the prevention or modification of measles and protection against infectious hapatitis except that now it must pass tests to demonstrate full polio antibody content.

Each lot of the Gamma Globulin represents a pooling of material from at least 200 donors. It is treated with ultra-violet radiation and processed to contain 16.5 Gm. of globulin per 100 cc. The average blood donation yields approximately a single recommended dose for the prophylaxis of poliomyelitis in a 6 or 7 year old child.

Since gamma globulin is extracted from human blood, the supply will always be limited. Attention should also be called to the fact that no donated blood from the American National Red Cross or other agencies is used to make the serum to be sold in drugstores.

The gamma globulin is supplied in 10 cc. and 2 cc. vials. The label indicates that the agent has been tested and conforms to the specifications of the United States Public

Health Service for polio antibody content. In addition the product is tested for antibody content against measles and infectious hepatitis.

In a report to physicians sent out this summer, Dr. Kenneth S. Landauer, Assistant Medical Director, National Foundation for Infantile Paralysis, points out that "gamma globulin is the only proved weapon now available to physicians for prophylaxis against paralytic poliomyelitis."

"The basic scientific evidence established in 1951 and 1952 field trials that gamma globulin can prevent paralytic polio has recently been not only reaffirmed but strengthened, so that its usefulness seems even greater than we formerly believed," states Dr. Landauer.

Failure to understand the limitations of gamma globulin accounted for public confusion during the summer of 1953, when it was made available as a public health measure, says Dr. Landauer. "As a result of the mode of distribution, the 1953 use of gamma globulin for mass or group prophylaxis against poliomyelitis was only in rare instances correctly timed for maximum effectiveness," Dr. Landauer writes. "In many communities it was not given until the peak of a poliomyelitis epidemic had already passed. Adverse reports on its use were therefore scientifically meaningless. Data collected in the 1951-1952 control studies still stand as valid, reliable, and undisputed."

BUY QUALITY IN YOUR PRINTING

An old adage says "Clothes make the man." Perhaps this is not true in a very strict sense, but nevertheless a well-groomed man makes a better impression than one who is not. This same reasoning may well apply to the printed forms which leave your office. A dignified, well-printed statement or envelope can lend a great deal of prestige to your practice. It costs no more to get QUALITY printing than poor printing.

We've had many years of printing experience and would like to help you with your printing requirements.

MIDWEST-BEACH COMPANY

222 South Phillips Ave.

Sioux Falls, S. Dak.

More strains of
gram-positive organisms
are sensitive to
Than to any other
systemic antibiotic
in Common use



Specify Lilly, the originator of Erythromycin:

Tablets No. 7, 'Ilotycin,' Crystalline, 100 mg., specially coated, in bottles of 36 and 100; Tablets No. 23, 'Ilotycin,' Crystalline, 200 mg., specially coated, in bottles of 24 and 100.

WE ARE A LILLY DISTRIBUTOR

BROWN DRUG COMPANY

Sioux Falls, South Dakota



SOME HIGHLIGHTS OF NARD 56th ANNUAL CONVENTION

Druggists attending the 56th annual convention of the National Association of Retail Druggists, meeting in Houston, Texas, from October 10-14, were warned that if the state pharmacy laws were not made more stringent, federal authority over pharmacy would be increased instead of reduced.

N.A.R.D. President M. V. Hardesty called on the druggists to correct the serious laxities found in many of the state pharmacy acts. He also said that surveys show that it is usual for most of these laws to be left with haphazard and superficial enforcement.

"It is plain," he said "that federal authority will be increased instead of reduced unless many of the pharmacy acts are made more stringent, and in addition are backed by determined and adequate enforcement."

Vigorously, Mr. Hardesty told the convention that failure to provide corrective legislation at the state level could persuade Congress to vote funds to extend the police activities of the Food and Drug Administration. "The potency of modern drugs is such that a fringe identified with the profession of pharmacy could bring it about through the creation of public clamor," Mr. Hardesty said.

Urges Druggists to Look to Future

In his message the President asked the druggists to give thought to the drug store of tomorrow. "It is for us to think in terms of an expansive outlook," he said, "then we will evade narrow and confined conclusions and not become victims of notions derived from pessimistic observations."

In developing his theme, Mr. Hardesty said he believed that the drug store of the future would have a greater volume of business than the drug store of today. "This increased business," he said, "will be due to five factors, namely, plenty of floor space for a display of merchandise, constant regard for

the convenience of customers, emphasis on the primary function of the drug store, use of effective techniques of business promotion, and participation in community betterment activities and the public relations program of the N.A.R.D."

"The prestige of the drug store will be higher tomorrow than it is now," said the President in conclusion, "and the profession of pharmacy will attain a status much above the position it holds today in the sphere of public health."

Seward Stresses Necessity of Public Relations

Chairman Charles R. Seward, in his report, analyzed the public relations activities of the N.A.R.D. and asked the druggists to take a more active part in organized activities intended to enlighten the consumers on the services of pharmacy.

"Surveys show that the prestige of the drug store tends to decline in the mind of the public," Mr. Seward stated. "For that reason, the public relations program is keyed to the existent conditions that deprive the druggists of the good will they must have if they are to be a constructive influence in the sphere of the health agencies."

Pointing out that a trial series of messages had been published in the Saturday Evening Post, Mr. Seward said that the druggists who tied in with this public relations program found it even more effective in the way of results than they had imagined. "Unfortunately, the Chairman said, " only a minority of the druggists availed themselves of this opportunity. For the welfare of pharmacy, we must bring about a comprehensive public relations program to correct the attitude of the public."

Druggists Asked to Resist Promotion Schemes

Mr. Seward called on the druggists to resist the promotion schemes of rebate coupons and deals. "The worst aspect of such promotion schemes is the reaction of the consumer," Mr. Seward said. "The customers feel they are being gouged, and the prestige of the popular brands promoted through rebate coupons is injured to a marked degree."

The Chairman said that the "deals," such as those schemes by which the consumer can buy an extra bar of facial soap with the purchase of three, are heavy burdens on the retailers. "Furthermore," he said, "these devices persuade the consumers to believe that the regular prices are exorbitant. It is a logical reaction to frequent cutrate prices on popular brands of merchandise."

Dargavel Warns That Fair Trade Will Be Under Fire

Secretary John W. Dargavel, in his report, told the druggists that they may expect a drive against Fair Trade in 1955. "It is time now

for us to gird for the fight that lies ahead," Dr. Dargavel said, "and in order to prepare for the conflict we must first contact the candidates for Congress in person as soon as possible before the general election in November."

"The independent druggists will never be docile and silent while the predatory forces in business strive to tear down the legislative barriers to cutthroat competition," the Secretary stated.

Critics of D-H Law Asked to be Specific

In his report the Secretary asked the critics of the Durham-Humphrey Amendment to be more specific in their charges against it. "If critics would be specific in their allegations, and if the N.A.R.D. believes that the criticisms are just, then this Association would move at once to correct anything in the legislation that is contrary to the interests of pharmacy and the public," he stated.

Dr. Dargavel warned that the criticisms must be based on solid foundations of fact. "Just to allege that the law is an 'annoyance to the physicians" is much less than enough as a basis for action to repeal any provisions of the Durham-Humphrey Amendment.

"A few druggists claim that doctors refuse to be bothered with refills of prescribed medication. It is a serious indictment of the medical profession," Dr. Dargavel said, "and I for one refuse to believe it is true that physicians have ceased to be concerned with the oath they took and the obligations of a license to practice medicine."

Says Price-Footballing of National Brands Imperils Manufacturers' Future Business

"The manufacturer of respected trademarked goods who permits his products to be price-football will find that his possible sales advantage today has been gained at the expense of his business tomorrow," Maurice Mermey, director of the Bureau of Education on Fair Trade, claimed as he addressed the convention.

Mr. Mermey said that making the fair trade law work more effectively than ever in the marketplace is "the job of the legitimate, responsible retailers of America as well as the job of national brand manufacturers." He added:

"The retailer determines whether the good will in the trademark which the manufacturer has built up will pay off for him at the cash register. Are we honoring the manufacturer who steadfastly and vigilantly honors his signature on his fair trade contracts?" It is up to individual retailers to work hardest in selling the trade-marked merchandise of those manufactured who "respect fair trade both as a law and a contractual obligation," the speaker noted.

"No manufacturer is required to fair-trade his prohe finds other if duct methods of distribution more to his taste," the Bureau director continued. "Indeed, those manufacturers who are lukewarm about fair trade and who do not lift a finger to honor their fair trade contracts would do the cause of fair trade a real service by abandoning it altogether.

"The discount house and the price-chiseler are no substitute for the established retailer. Manufacturers who have been playing both ends against the middle are beginning to realize this. In the electric appliance field, for example, manufacturers who have fought the good fight for fair trade are getting top promotion on their products from established retailers.

"But those manufacturers who have been sitting on their hands, letting the discount houses price-football their products are beginning to see the disintegration of their good will because their products are getting the cold shoulder from established retailers. Their distribution is being reduced, in some cases sharply, because many retailers are dropping lines that have become all loss to them."

Manufacturers who are doing an honest fair trade job "have cold hard sales figures to prove that it pays to honor one's signature," Mr. Mermey said, noting that "the sales of champion fighters for fair trade are hitting new peaks."

Fair Trade Vital to Small

Business

The complexities of our modern mass-production economy "have brought us to the growing recognition that the well-being of the whole nation depends upon the well-being of all people who make up America," the speaker continued. "We are, in truth, interdependent. Our recognition of this interdependence is reflected in the measures we have taken to help farmers and labor, in subsidies for vital industries like shipping and sugar beets, and in tariffs to protect domestic producers.

"I am not personally taking a position for or against any of these measures. I am merely pointing out that they exist because the people as a whole think that the nation as a whole is strongest when each of its interdependent parts is strong. Small business is one of our vital interdependent parts. It has not sought subsidies nor parity programs but it has asked for the preservation of laws to restrain the forces of unfair competition. These laws merely give small business a fighting chance to survive, nothing more.

"The destruction of the fair trade laws can only have one meaning — that small business is expendable. You can be sure that the ten million people whose livelihoods depend upon the well-being of small business will fight with their every resource against any such concept of the role og small business in our society," he concluded.

PHARMICS ELECTED TO NATIONAL HONORARY

Pharmacy students elected to the Honor Society of Phi Kappa Phi are Floyd Bly of Brookings, S. D. and Sheldon Murphy, Forestburg, S. D. Bly and Murphy rank among the top four students in the senior class at South Dakota State College.

In order to be eligible for this honor, a student must have at least a 3.25 grade point average (3.00 corresponds to the letter grade B) and at State College membership is further limited to 6% of the senior class.

Bly and Murphy are also members of Rho Chi National Honorary Pharmaceutical Society.

ARMY ROTC APPOINTS PHARMACY STUDENTS

Announcement of the senior pharmacy students appointed as cadet officers in the Army Reserve Officers Training Corps at South Dakota State College was recently made by Lt. Col. J. B. Mullinix, professor of military science.

Lieut. Colonel James Swain, Rapid City was appointed a battalion commander; Major Robert Voy, Dell Rapids was named to an assistant battalion commander post; and Richard Lovaas, Gary, will serve as a company commander with the rank of cadet captain.

Pharmacy students serving as platoon leaders include cadet first lieutenants Clair Hetland, Arlington, and Donald Hecht of Lakefield, Minnesota.

Richard Angerhofer, Twin Brooks; Marlin Radtke, Faribault, Minn.; Rollins Juhnke, Kasson, Minn.; and Richard Olson, Watertown will serve as platoon leaders with the rank of cadet second lieutenant.

RAPID CITY PHARMACISTS PLAN YEAR'S PROGRAM

The Rapid City Pharmaceutical Society held its first fall meeting at the Leon Hobart home October 5, according to Nina Lund, Chairman of the Publicity Committee of the Society.

Plans for the 1954-55 program were discussed and committees assignments outlined.

Stressing information on new drugs, the group is planning a "Study Project." Guest speakers and occasional movies will discuss specialty topics pertaining to the modern pharmaceutical profession.

The featured event of each year, The Doctor'-Pharmacists' Party, will again be a post-holiday affair, taking place in January or February. The program and entertainment is under the direction of the entertainment committee, Al Raynes, chairman.

Meetings of the Society are held on the first Tuesday of each month and are in charge of a monthly program committee. The committee for the November meeting consists of H. W. Mills, Georgia Baker and Mary Ann Kohler. Now in its sixth year, the Rapid City Pharmaceutical Society was organized July 27, 1949. This live organization counts 33 active members at the present time. Officers for the 1954-55 year include Andrew J. Olson, President; Fred Eickhoff, Vice President; Priscilla Zenk, Secretary; and Joe Goldman, Treasurer.

OSCO DRUG SCHOLAR-SHIPS ANNOUNCED

Two new scholarships for pharmacy students have been donated to the Division of Pharmacy, South Dakota State College by the Osco Drug Corporation of Chicago. The scholarships will pay full tuition and fees for one year and will be awarded to deserving students in the sophomore class. If satisfactory academic standing is

maintained, the scholarship may be reawarded for the junior and senior years.

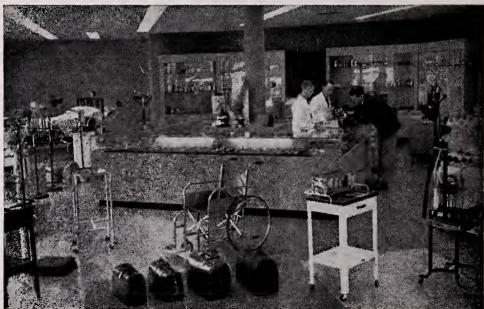
A.Ph.A. STUDENTS BRANCH MEETS

The first formal meeting of the 1954-55 school year of the South Dakota State College Student Branch of the American Pharmaceutical Association was held October 13 in the Union Building on the campus.

Designed to introduce the Association to the freshmen pharmacy students, the program included talks about the national and local organization and its publications by Leon Pfotenhauer, Prof. Kenneth Redman and Prof. Harold Bailey.

A film entitled "Rx" was shown by coutesy of E. R. Squibb & Sons following which the members enjoyed refreshments.

Whenever You Are In Sioux Falls Be Sure and Visit Our New Store



Complete Line of Equipment, Supplies and Drugs

KREISER'S Inc.

21st & Minn.

Sioux Falls, S. D.



TWO SUCCESSFUL HIP NAILINGS IN ONE PATIENT AT AGES OF 93 AND 95 YEARS*

Robert E. Van Demark, M.D., F.A.C.S. Sioux Falls, South Dakota

A pessimistic view is usually taken in case of a hip fracture in an individual of more than ninety years. This viewpoint is justifiable in many instances but not necessarily so, as illustrated in the following case in which the patient survived, became ambulatory after one hip nailing and pain-free after two successive hip nailings. A recent review of the literature on the subject (1) revealed no similar case report.

CASE REPORT

A white female, age 93, was admitted (No. 97,846) to McKennan Hospital on November 8, 1950, following a fall. Her principal complaint was pain in the left hip and thigh. The patient's health had always been good. Physical examination revealed an external rotation deformity and shortening of the left leg in an elderly female whose blood pressure was 200/100, pulse 100, temperature 98.4 F. and respirations 18 per minute. Roentgenographic examination (Fig. 1) revealed an intertrochanteric fracture of the left hip. Examination of the blood and urine was not remarkable except for a mild hypochromic anemia and a trace of albumin in the urine.

The following morning surgery was performed under a combined sodium pentothal — local anesthesia in which 7 grains (0.45 gm.) of sodium pentothal was given. Following * Paper presented at the McKennan Hospital Surgical Sectional Meeting, September 14, 1954.



Fig. 1. Intertrochanteric Fracture of the Left Hip incurred in a fall.

closed reduction of the fracture, a blind hip nailing was performed. Because of comminution of the greater trochanter, two stainless steel pins were inserted to promote stability in addition to the nail plate (Fig. 2). The operation, including the exposure and development of the roentgenograms, was completed in fifty-five minutes and the patient left the operating table in good condition.

Following surgery, the patient's pain was markedly diminished and practically no narcotics were required. Because of difficulty controlling the bladder, an indwelling catheter was inserted. The patient had never been in a hospital before and was anxious to return to her home. She was dismissed from the hospital November 15, 1950. Her subsequent

course was directed by her local physician who did an excellent service and the patient subsequently became ambulatory. Roentgenographic examination showed good bony union.

On May 2, 1953, she was re-admitted (No. 113,670) to McKennan Hospital with a history of having fallen two days previously and injuring her opposite right hip so that she could not walk. Her physical condition was essentially unchanged. Although her age was now 95, her blood pressure had not increased and



Fig. 2. Post-operative appearance of the left hip following surgery.

was now 188/98. A mild hypochromic anemia was present and the urine showed, in addition to the trace of albumin, 50-60 W.B.C. per high power field. Roentgenographic examination of the right hip revealed a trochanteric fracture of the right hip with angulation which was best demonstrated on the vertical view (Fig. 3).



Fig. 3. Fracture of the right hip at the base of the neck and trochanteric region: with angulation best demonstrated in the vertical view.



Fig. 4. Roentgenogram following fixation by nailplate and stainless steel screws.

Surgery was performed on May 4, 1953 under local anesthesia (Procaine Hydrochloride). Although there was some difficulty in effecting a closed reduction, a blind hip nailing was performed through a lateral incision; a nail-plate and three stainless steel screws were inserted in good position as shown on the anteroposterior (Fig. 4) and

vertical roentgenograms taken after completion of the operation. The operative procedure was completed in twenty-two minutes and the patient's condition remained unchanged throughout. Two hours following surgery, the respirations became irregular for a period of forty-five minutes. The postoperative condition was otherwise good. She was free of pain on the evening of surgery and was very contented when she was placed in a chair; she did not care to return to bed for almost an hour. Her subsequent course was satisfactory in all respects and she was dismissed from the hospital on May 7, 1953 to her home. Her family physician again successfully managed her post-operative course. Although she was entirely free of pain, the patient did not become ambulatory as before, despite the efforts of her family who were most cooperative in her case. The patient lived until June 29, 1954 when she passed away in her sleep at the age of 96, lacking less than two months of attaining her ninetyseventh birthday.

DISCUSSION

This patient's course well illustrates the advantage of hip nailing in the extremely aged. Pain is eliminated, the nursing care is simplified, early dismissal from the hospital is frequently possible and recovery is often sufficient to permit ultimate weight bearing. Following hip nailing, all the patient's usual activities can be resumed except walking and weight bearing. The use of local anesthesia is a definite factor in reducing the pain of transporting the patient to surgery and manipulating the fracture, as well as the operative shock and the post-operative morbidity due to pulmonary complications. Where operation is not contraindicated because of general systemic conditions, hip nailing is a valuable procedure in this extremely aged group.

BIBLIOGRAPHY

1. Van Demark, G. E. and Van Demark, R. E.: Hip Nailing in Patients of Eighty years or Older; Experiences in 104 Consecutive Personal Cases. Am. J. Surg. 85: 664-668, May 1953.

Whenever You Are In Sioux Falls Be Sure and Visit Our New Store . . .



Complete Line of Equipment, Supplies and Drugs

KREISER'S Inc.

21st & Minn.

Sioux Falls, S. D.



INJURIES TO THE LIVER J. A. Eckrich, M.D., Aberdeen, S. D.

Injuries to the liver are common, due to its large size, central location and relative friability. They are due to external violence applied either to the chest or abdomen. According to Moritz war wounds involve the right lobe in 83.5 percent of cases, although, the left lobe is more frequently injured in civilian accidents due to misdirected violence aimed at damaging the heart.

TYPES OF INJURIES

Injuries to the liver may be classified as penetrating and non-penetrating wounds. In the former are contained chiefly bullet and stab wounds. Hemorrhage and shock are the major immediate complications of penetrating wounds. Following in order are peritonitis, renal failure, biliary fistulas, emphysema, sub-diaphragmatic abscess and pulmonary embolism. Penetrating bullet wounds frequently lead to infarction around the tract which results in considerable destruction of liver tissue and terminal localized fibrosis resembling cirrhosis.

In civilian life injuries by blunt force are common and secondary only to injuries of the brain. The most common cause for such injuries are automobile accidents, injuries from kicks, blows and falls. Occupational accidents are additional causes. Feotal injuries during difficult labors have been reported. The liver is frequently crushed, lacerated or bruised without external evidence of injury to the thoracic or abdominal walls. Injuries to the liver are more common in children than in adults. There is a wide variation in the loca-

tion and character of non-penetrating injuries, the right lobe being injured five times as often as the left and the convex surface twice as often as the concave. Congestive and inflammatory diseases increase susceptibility to liver injury.

Non-penetrating injuries may involve both capsule and parenchyma. Occasionally the capsule is intact and large collections of blood and bile accumulate beneath. Hitzrat reports 82 oz. of blood aspirated from one such hematoma.

Tissue repair following liver injury may be complete or incomplete depending on the extent of tissue damage. In the event of survival, full functional restitution is generally made. Partially destroyed lobes may regenerate by a growth of cord cells and metaplasia of cells of the small bile ducts. Regeneration does not take place following the destruction of whole lobes but their loss is compensated by a hypertrophy of the remaining lobules. (Poufick, Mann). Large intrahepatic or subcapsular hematomas may heal completely leaving only a hemosiderin impregnated scar and adhesions between the liver and the adjacent structures. Completely detached fragments of liver tissue may attach themselves and become incorporated into the peritoneum. Minor injuries usually heal with no after effects.

Remote sequelae of liver injuries associated with intraperitoneal biliary fistula usually result in the accumulation of bile, blood and fragments of liver tissue within the peritoneal

cavity. There conditions predispose to a peritoneal irritation or when invaded by pathological organisms, general peritonitis. There may be localized abscess, multilocular spaces formed by plastic and fiberous adhesions and filled with bile or bile stained exudate. Post traumatic extravasation of bile have been reported by Vance and McQuillan. Whipple has observed bile-filled pseudocysts beneath the hepatic capsule and within the hepatic ligaments (Moritz). Stern reports fat and liver tissue emboli caused by fragments becoming detached and entering the circulation affecting most commonly the heart and lungs. Clinical symptoms and end results in these instances are the same as in emboli from other sources.

CASE NO. 1

This is a case of a male child aged 2 years who is well-developed and fairly well-nourished. The past and previous history is unessential except for a history of convulsive seizures of an epileptiform nature in which the child had fallen on repeated occasions resulting in minor bruises about the hand and face.

History of present accident reveals that just previous to hospital admission, the child fell from a stool approximately 2 or $2\frac{1}{2}$ feet high onto the floor. The mother heard the child cry and came in from the adjoining room to find the child lying prostrate on the floor. Picking up the child, the mother stated that he was semi-conscious for only a moment, recognizing her, and very shortly thereafter lapsed into unconsciousness at which time he was taken immediately to the hospital. Upon arrival at the hospital the child was dead.

The autopsy findings are those of a well-developed, fairly well-nourished male child age 2 years. External findings were essentially negative except for evidence of previous minor bruises about the head and neck with small areas of contusion and discoloration. There was no external evidence of injury to the chest or abdomen. The abdomen was somewhat distended and dull in the flanks, tympanitic throughout the epigastrium. No evidence of external injury was noted about the abdomen, chest, back or extremities. Upon entering the abdominal cavity a large amount of dark fluid blood was encountered. There was marked hemorrhage

occupying practically all of the right hypergastric region. This appeared to be extraperitoneal. The right lobe of the liver extended 4 cm. below the lower costal margin. The left lobe of the liver extended 6 cm. below the lower costal margin. There was a tear entirely through the liver at a point between the right and left lobes which extends from the inferior to the superior border.

The abdominal cavity contained a large amount of dark free bloody fluid. There was marked extra-peritoneal hemorrhage occupying practically all of the right hypergastric region and a tear in the liver extending entirely through the liver and capsule at a medial point between the right and left lobes. The gross appearance of the liver was normal. Microscopic sections were normal except for moderate congestion found in the lower lobe of the left lung. Cause of death: Massive tear through the liver between the right and left lobes with secondary hemorrhage and shock.

CASE NO. 2

This case is a 19 year old white female with a history of an automobile accident just previous to hospital admission. On admission the patient was in severe shock, pulseless, B.P. was 0/0, skin cold, pale, ashen and cyanotic. Patient was in semi-conscious state for a short time after admission, soon lapsing into unconsciousness with bleeding from superficial scalp wounds and excoriations over both knees due to recent injury. There was no evidence of crushing injury to the chest or abdomen, no external signs of contusions or lacerations present over back, abdomen or chest. The patient lapsed into unconsciousness and passed away 11/2 hours after admission to hospital.

Autopsy findings revealed no external evidence of injuries over the chest, back or abdomen. There were external lacerations of the scalp, and free blood was found in the posterior calvarium, also hemorrhage under the periosteum with extradural hemorrhage. There were lacerations of the lower lobe of the right lung with some hemorrhage into the pleural cavity. On opening the abdominal cavity there was a large amount of free-bloody fluid in the peritoneal cavity. The blood came from extensive lacerations due to rupture of the right lobe of the liver. The abdominal viscera was otherwise essentially

negative. The liver weighed 1,500 gms. Further examination of the liver revealed extensive tears and lacerations over upper and lateral aspects of the right lobe. Surrounding liver tissue showed evidence of bruising with local hemorrhage, otherwise, the liver tissues appeared to be normal. Tissue sections of the liver were normal.

Although multiple injuries were present in this case, the findings most concerned in this report were the extensive lacerations and contusions with tearing of the right lobe of the liver resulting in extensive hemorrhage into the peritoneal cavity. The presence of shock and death which soon followed were attributed to the liver injuries and hemorrhage. There was no external evidence of injury over the region of the liver, right kidney or chest

Case Reports presented at St. Lukes Hospital Staff Meeting, April, 1954.

SUMMARY

- 1. Liver injuries may be classified as penetrating and non-penetrating.
- 2. Next to the brain, the liver is the organ most commonly injured by blunt violence.
- War injuries and automobile accidents are the most common cause of liver injuries.
- Children are more susceptible to liver injuries.
 The right lobe is injured five times as often as the left and the convex surface twice as often
- as the concave.

 Liver injury is irrespective of external violence.

 Shock and hemmorrhage are the most common
- immediate complications.
 8. In the event of survival, complications include intraperitoneal biliary fistula, peritonitis, hematoma, adhesions, pseudocysts and abscess.

BIBLIOGRAPHY

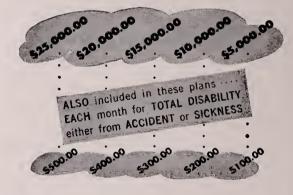
- Moritz Pathology of Trauma. Second Edition. Chap. 7 pp. 242-249.
- Geill, C. Die Rupter innerer organe durch Stumpfe Gewalte, viertel-jahrsschrift f. gaitehtliehe Medienin U. offentl. Sanitats 18, 2, 14, — 1899.
- 3. McQuillan, A. H. Traumatic Bile Cyst. J. Manie Med. Assoc. 19, 193, 1928.
- 4. Vance, B. M. Subcutaneous Injuries of the Abdominal Viscera. Arch. Surg. 16; 631, 1928.
- Whipple Traumatic Rupture of the Liver; Formation of Cyst Swelling Containing Bile-Stained Fluid. Lancet. 1, 719, 1898.
- 6. Hitzrat, J. M. Subcutaneous Injuries to the Liver. Annals of Surgery 66, 50, 1917.
- 7. Ponfick, E. Experimentelle Bietrage Zur Pathologieder Liber. Virchows Arch. Path. Ont. 118, 209, 1889; 119, 193, 1890.
- 8. Mann, F. C. Complete and Partial Removal of the Liver. Medicine 6, 419, 1927.
- 9. Wangensteen, O. H. Escape of Sterile Bile into the Peritoneal Cavity. Annals of Surgery. 84, 691, 1926.

Something NEW is Cooking



MORE INSURANCE NOW AVAILABLE

TOUCK! HOW THESE AMOUNTS WOULD HELP IN PAYING ESTATE TAXES IN CASE YOU ARE ACCIDENTALLY KILLED...



SPECIFIC BENEFITS ALSO FOR LOSS OF SIGHT, LIMB OR LIMBS FROM ACCIDENTAL INJURY HOSPITAL INSURANCE ALSO FOR OUR MEM-BERS AND THEIR FAMILIES.

> \$4,000,000 Assets \$20,000,000 Claims Paid 52 Years Old

Physicians Casualty & Health Ass'ns.
Omaha 2, Nebraska



MEDICAL SCHOLARSHIPS

The recent action of the South Dakota Division of the American Academy of General Practice in establishing a one hundred dollar medical scholarship, in memorium to Doctor J. A. Kittelson, is to be commended in fulfilling an ever-increasing need in medical education. It is to be hoped that other agencies, as well as individuals, may realize the value of these "incentive" scholarships to medical students and will follow the lead which has been initiated by the Academy.

Actually there are two primary functions served by these scholarships. Even small sums, from twenty-five dollars upward, serve as an incentive to the worthy and needy student quite aside from recognizing a job well done. This is true irrespective of the criteria used to award such scholarships; that is, whether it be academic achievement, financial need, fitness for medicine, improvement in accomplishment, or any combination of these characters.

A second, and potentially more valuable function for such scholarships, is the incentive they may hold to the potential medical student who may be uncertain of the future because of limited finances. Medicine today is not getting its fair share of qualified high school and college students. Attendance at many high school career days throughout the state reveals only a lukewarm interest in med-

icine on the part of high school seniors. There is reason to believe that many students at the college level, even though possessing the proper motivation for medicine, are hesitant to obligate themselves, family, or other interested parties to a large financial outlay spread out over several years of study. It has been our experience that students who are able to meet their obligations for the first year in medicine have access to loan funds and employment in subsequent years which enable completion of their medical study. At South Dakota a one hundred dollar scholarship is very nearly a full semester's tuition and it is evident that even smaller scholarships are of considerable assistance to the freshman and sophomore students. I, for one, am quite opposed to the outright proselyting and subsidization of medical students either by state, federal, or private agencies. I believe that a self-reliant, properly motivated and industrious student has those qualities of character and enterprise which medicine needs just as seriously as in many other segments of our society. Small incentive scholarships offer only another opportunity to the resourceful student in furthering his interests in medicine.

> W. L. Hard, M.D., Dean School of Medical Sciences University of S. Dakota

THE MONTH IN WASHINGTON

With the change in control of Congress, there naturally will be a major reshuffling of all committees, including those handling medical and health legislation. A new chairman moves to the top, and at the bottom a few Republican members drop off, to be replaced by an equal number of Democrats. In a Congress so evenly divided, domination of this committee machinery is a vital asset.

A majority of the Democrats taking over committee chairmanships in January will be returning to the same jobs they held when their party was in power before, but the situation is a little different on the two committees most important in health and medical legislation. It will be the first time either of these chairmen has had the responsibility of running the full committee, although both have been involved in medical legislation for many years. Both are veteran legislators and are Southerners. They are Senator Lister Hill of Alabama, who replaces Senator H. Alexander Smith of New Jersey as chairman of the Labor and Welfare Committee, and Rep. Percy Priest of Tennessee, who succeeds Chairman Charles Wolverton, also of New Jersey, on the Interstate and Foreign Commerce Committee.

By reason of seniority, Senator James Murray of Montana is in line for the Labor and Welfare Committee chairmanship. However, he has announced that he prefers to run the Interior and Insular Affairs Committee, thus turning over the other chairmanship to Senator Hill. Senator Murray, as a sponsor of national compulsory health insurance, and as a chairman and member of its committee that held such turbulent hearings on this subject, became well known to the medical profession.

Senator Hill, the son of a physician, has been in Congress for 30 years — 14 in the House before he came to the Senate. He was a co-sponsor of the Hill-Burton hospital construction program, perhaps the most important piece of medical legislation enacted since World War II.

Presumably the Senate committee's Health Subcommittee again will be headed by Senator Herbert Lehman of New York, who handled this task during the last Democratic Congress, the 82nd. Last session the Health Subcommittee chairman was Senator William Purtell of Connecticut.

Mr. Priest is a former school teacher and newspaperman. He has been in the House for seven uninterrupted terms. In 1951 he was chairman of the Commerce Committee's Health Subcommittee; the subcommittee system was abolished by the committee in 1952. Since then he has taken an extremely active part in committee work in the health and medical fields.

The Hill and Priest committees will handle most health legislation with the exception of military, veteran and appropriation bills. For example, they will be in charge of reinsurance if it is reintroduced, as well as most healthmedical bills originating in the Department of Health, Education and Welfare.

Other Changes

A number of other committee changes of importance to medical legislation are scheduled. Rep. Edith Nourse Rogers of Massachusetts, a veteran of 29 years in the House, loses the chairmanship of the Veterans Affairs Committee. She is being succeeded by Rep. Olin Teague of Texas, who was elected to Congress for the first time while he was completing his six-year Army duty in 1946.

The House Appropriations Committee chairmanship goes from Rep. John Taber of New York to Rep. Clarence Cannon of Missouri; both have the reputation of being economyminded. Of considerable significance in medical appropriations is the change in the chairmanship of the subcommittee that handles money for the Department of Health, Education and Welfare. The chairman for the last two years, Rep. Fred Busbey of Illinois, carefully scrutinized all health appropriations, and effected many reductions. He was defeated for re-election. The prospective chairman of the subcommittee, Rep. John Fogarty of Rhode Island, repeatedly has intervened in the committee and on the House floor to restore money cut out by the subcommittee.

Chairman of the Armed Forces Committee in the Senate — where medical care for military dependents would be taken up — will be

(Continued on Page 441)



SEASON'S GREETINGS TO ALL OF GOOD WILL!

and

BEST WISHES FOR 1955

Since Christmas is God's Gift of Christ, giving characterizes its observance.

Good Will is the appreciation that we show others for the things they have done for us.



With the above teachings in mind, would not this be the time for those of us who have been careless and lax, to mail our contributions to the American Medical Education Fund? Remember that you can earmark your check for your own or for the medical school of your choice. It could be a token of appreciation and encouragement to the school that has done so much for you.

And then comes New Year's, another day on the calendar. That day carries with it the opportunity to pause and reflect; the opportunity to look ahead to still better days for our chosen profession.

My life shall touch a dozen lives
Before this day is done;
Leave countless marks for good or ill,
Ere sets the evening sun.

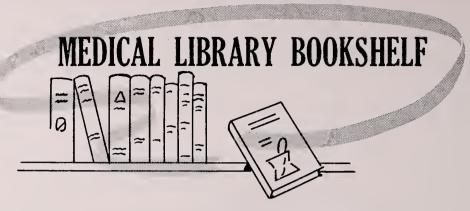
So this the wish I always wish,

The prayer I ever pray;

Lord, may my life help other lives

It touches by the way.

A. W. Spiry, M.D.



SURGICAL JOURNALS

(Continued from November Issue)

A.A.A. Archives of Surgery.

This is one of the nine specialty journals published by the A.M.A. and is of especial value for the timeliness of the articles and the case studies and descriptions of experiments carried on.

V69; 148-153, 1954. This August issue contains an article by S. A. Swenson and D. E. Lee of the University of Nebraska School of Medicine entitled "Further experimental observations on fate of buried cutis and fullthickness skin grafts." Summary and conclusion: Rapid freezing and lyophilization of cutis and full-thickness skin destroys all epithelial elements leaving the collagenous and fibrous elements viable when used as buried implanted grafted material. The collagenous and fibrous elements remain viable either as autografts or homografts. Duration of storage of material seems to have no effect upon its viability . . . Possibility of use of this material in many fields. It has already proved its worth in large fascial defects. As a stored homograft its use could be applied to the field of congenital body-wall defects, such as absence of the hemidiaphragm and omphalocele and many others.

British Journal of Surgery. (Issued in alternate months.)

Sir Stanford Cade is one of the outstanding authorities of England on cancer and has written a three volume set of books entitled Malignant Disease.

V41; 225-230, 1953. This article by Sir Stanford Cade, "Carcinoma of the floor of the mouth," concludes (1) Early and small localized growth should be treated by radiation only. (2) Local involvement of tongue and gum requires local diathermy in addition. (3)

Involvement of bone and widespread disease in the mouth is offered a better chance by surgical excision. (4) Repair should be accomplished as quickly as possible, with planned cooperation with a plastic surgeon. (5) Progress in future will depend on early diagnosis; technical, clinical, and biological advances in radiotherapy; and surgical advances, especially in methods of closure of wounds.

Excerpta Medica Section IX Surgery. (Published monthly)

For international review-abstracts in English, arranged under subject headings, including anesthesia, surgical physiology and pathology, chemotherapy, tumours, plastic surgery, skull, neck, thoracic, surgery, abdomen and pelvic and many others.

Example under heading heart.

5202. Thompson, V. C. London, W. 1. A knife for mitral valvotomy. Lancet, 1954, 1/14(710) Illus. 1.

Description of a knife which fits on the index finger like a signet ring presenting a small cutting surface which will cut through the glove to the mitral commissure. It is made of thin, pliable material, very light in weight. Temple-Liverpool.

Experimental Medicine and Surgery.

Published quarterly in Basel, Switzerland, international in scope with articles printed in English, French or German. Mostly articles in experimental medicine with an occasional one on surgery.

V10; 110-119, 1952. The indications for surgery in mitral stenosis by R. P. Glover and others, presented on the program of the first national meeting of the American College of Cardiology.

This article points out that to date most of the cases referred for surgery have been progressively and terminally incapacitating, and irretrievable. The statically incapacitating group should be operated on in greater measure and with a greater understanding of the inherent nature of progressive mitral stenosis. The demonstration of a technically successful operation places the burden of selecting patients at an early stage on the shoulders of the practicing physician.

International Surgical Digest.

"A monthly abstract journal of current literature" edited by Dr. Alton Ochsner. Many of the abstracts are full enough to make it unnecessary to read the original article.

Example p. 342.

The Surgical Treatment of Peptic Ulceration and Stricture of the Lower Esophagus, Sweet et al — Annals of Surgery, 139:258 (March) 1954.

... "In summary, the good to excellent results comprise 32 (91 per cent) of the 35 patients, with only 3 (9 per cent) whose end result is poor."

"The evidence presented bears out the impression that resort to surgical measures should never be deferred in any case of ulcer or stricture of the esophagus where there is a history of bleeding, obstruction unsuccessfully treated by bougienage, intractable pain, or, in some instances, evidence of perforation."

"If a careful choice of operative procedure is made to suit the conditions encountered and the age and physical status of the patient, a satisfactory clinical result can be anticipated in at least 90 per cent of the patients." The Journal of Bone and Joint Surgery.

Published in two separate volumes, one American, the other British. Six issues yearly.

V36A; 912-920, 1954. Digital Anthroplasty of the proximal interphalangeal joint in selected cases the criteria for which must be (1) ankylosis in a position of great deformity (2) no damage to the tendons which produce motion at the middle joint (3) a high degree of motivation in the patient to regain mobility.

Resection of distal portion of proximal phalanx used and skeletal traction maintained for six weeks. 83% of 30 patients improved.

(To be Concluded in the Next Issue)

Mrs. Esther Howard

Medical Librarian

(Continued from Page 438)

Senator Richard B. Russell of Georgia, replacing Senator Leverett Saltonstall of Massachusetts. On the House side, the Armed Forces chairmanship goes to the veteran Rep. Carl Vinson, also of Georgia. He replaces Rep. Dewey Short of Missouri.

Any bills proposing reorganization of the executive departments will come before Chairman John L. McClellan of Arkansas in the Senate and Rep. William L. Dawson of Illinois in the House. They are succeeding Senator Joseph R. McCarthy of Wisconsin and Rep. Clare E. Hoffman of Michigan.

(EDITOR: This summary is, of course, predicated on the Democrats surviving a threatened recount of the close Senate vote in Oregon and going ahead with organization of both chambers.)

IMPORTANT NOTICE To Users of the UNIFORM INSURANCE REPORT FORM

The Uniform Insurance Report Form adopted by the State Medical and Hospital Associations was intended to reduce the number of forms utilized in reporting hospitalization, medical and surgical claims.

Please do not use it for Workmen's Compensation cases—the State of South Dakota has a special approved form for compensation cases that all insurance companies honor.





This is your MEDICAL ASSOCIATION

N. C. CONFERENCE WELL ATTENDED

Seven South Dakota physicians were in attendance at the annual North Central Medical Conference in St. Paul, November 13th and 14th.

Representing South Dakota were: president, A. W. Spiry, M.D., Mobridge; president-elect, F. D. Gillis, M.D., Mitchell; vice-president, A. P. Peeke, M.D., Volga; past-president, D. A. Gregory, M.D., Milbank; past-president, H. Russell Brown, M.D., Watertown; past-president, R. G. Mayer, M.D., Aberdeen; house speaker, R. A. Buchanan, M.D., Huron; and executive-secretary Foster.

The Sunday sessions featured discussion on licensure of foreign educated physicians on the witness stand, a legislative report, and others.

In addition to the scheduled meetings, the North and South Dakota delegations met twice to discuss the 1956 joint meeting in Aberdeen and other matters of mutual interest.

INTERNISTS ORGANIZE

On the 20th of October 1954, the South Dakota Society of Internal Medicine, for the first time, held a meeting which was not in conjunction with any other Society. The meeting was

held in Sioux Falls and the attendance was most gratifying. The success was in a large part due to the panel of speakers which were secured. The following appeared on the program:

Dr. M. M. Hargraves,
Rochester, Minnesota
"Lupus Erythematosis"
Dr. James C. Cain,
Rochester, Minnesota
"Choledocholithiasis"
Dr. Elston Huffman,
Denver, Colorado
"The Refactory Cardiac
Case."

Local men participating were: **Dr. L. M. King** who showed slides on the Skin Manifestations of Internal Disease;

Dr. James Chalmers and Dr. A. K. Myrabo presented a case, discussed by Dr. T. H. Sattler.

At a business session, the following officers were elected for the coming year: President

Dr. T. H. Sattler Yankton Vice-President

Dr. E. T. Ruud Rapid City

Sec.-Treasurer

Dr. D. W. Maclean Sioux Falls

Future meetings will be held annually on a Saturday during the month of September and the locale of the meeting will be changed every year.

HURON DISTRICT ELECTS LEIGH

The Fifth District Medical Society, meeting in Huron on November 17th, elected Dr. Fred Leigh to be president of the District during 1955. Other officers are: vice-president, Joseph Tschetter, M.D., secretary-treasurer, C. F. Gryte, M.D.; delegate, P. H. Hohm, M.D.; and alternate delegate, C. F. Gryte, M.D.

Thirty-five members and wives gathered for dinner at the Marvin Hughitt Hotel and then met to hold the election and to hear a discussion of Blue Shield by executive-secretary, Foster.

THIRD DISTRICT HEARS PAPER ON FUNGUS

Twenty-five doctors and their wives attended the regular district meeting of the Third District Medical Society at Flandreau, November, 18th. Featured speaker on the program was Dr. I. D. Eirenberg, Sioux Falls, who spoke on "Fungus Diseases of the Skin." This was followed by a discussion of Blue Shield by executive-secretary, Foster.

ALLERGISTS SET NEW YORK DATE

The American Academy of Allergy will conduct a postgraduate teaching program in New York, February 4, 5 and 6. The first days course will be on contact dermatitis, the second on asthma, the third, a panel discussion on both.

The Annual Meeting of the Academy will be held in New York on the following three days. Information may be obtained from the American Academy of Allergy, 208 East Wisconsin Ave., Milwaukee 2, Wisconsin.

NEWS NOTES

Dr. Donald Hillan, pediatrician now in residency at Children's Hospital in Milwaukee, will join the staff of the Madison Clinic in July. Dr. Hillan is a native of Wentworth, South Dakota.

John C. Foster, executivesecretary, S. D. State Medical Association was a speaker on the program of the six-state North Central Medical Conference.

Dr. Burke Brewster. Fort Worth, Texas, has taken over the practice of **Dr. J. H. Crawford, Jr.,** in Watertown. Dr. Brewster specializes in eye, ear, nose and throat work.

Dr. L. W. Keller. Reedsburg, Wisconsin, has been added to the staff of the Peabody Clinic in Webster. Dr. Keller has just recently been released from active military duty.

Dr. Robert E. Van Demark attended the American Academy of Cerebral Palsy Meeting at Williamsburg, Virginia from November 4th through November 6th. Dr. Kenneth Cole, Jr., has associated himself with Dr. Charles Roberts in Lake Preston. Dr. Cole has been practicing in Texas until his move to South Dakota. Dr. Roberts plans to enter service early in 1955.

Drs. John B. Gregg. Sioux Falls, and Robert H. Ruby. Pine Ridge, were inducted into the American College of Surgeons at the College's Atlantic City meeting last month.

AMA is planning a Bermuda-Nassau cruise for physicians after the annual convention in Atlantic City next June 6-10. The cruise will cover eight days — information available from W. M. Moloney, Chicago, Burlington, and Quincy Railroad, Bankers Building, 105 West Adams Street, Chicago.

PRESS-RADIO GROUP MEETS NOVEMBER 6th

Ten representatives of the press-radio-medical professions met in Huron, Saturday, November 6th to discuss mutual problems of the medical profession with news media.

Roy C. Jernstrom, M.D., Rapid City, acted as chairman of the discussions after a dinner at which the medical group were hosts.

Other Medical Association representatives were: A. W. Spiry, M.D., Mobridge, President; S. M. Brzica, M.D., Sioux Falls, John C. Foster.

MEDICAL SCHOOL NEWS NOTES

The South Dakota Medical School has received a \$100.00 medical scholarship to be awarded to a deserving student, this from the South Dakota Chapter of the American Academy of General Practitioners. In awarding this scholarship the Academy has designated this scholarship in memory of the late Doctor John A. Kittelson.

* * *

The Medical School has also received announcement of the establishment of two medical student scholarships, each in the amount of \$100.00, awarded by the Yankton Clinic.

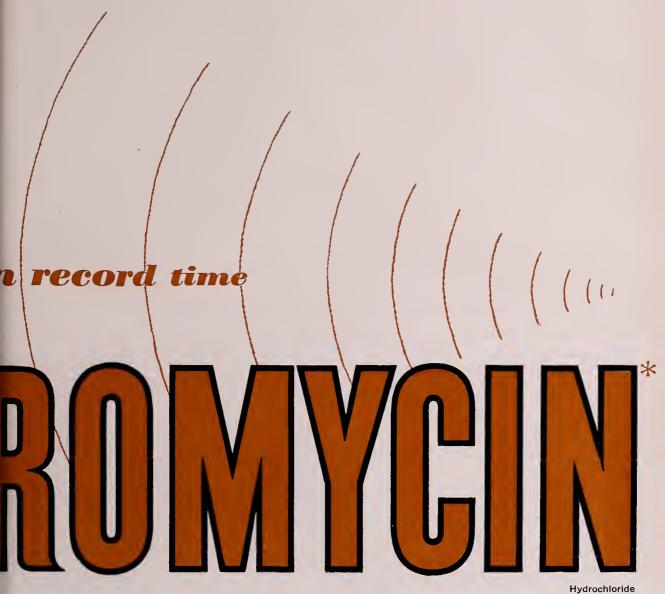
A fluoroscopic and x-ray unit has been installed in the Medical School to be used for both teaching and research purposes. Funds for this unit were donated by the South Dakota Heart Association, an affiliate of the American Heart Association.

Doctor Howard Shreves of Sioux Falls addressed the Student American Medical Association at the University of South Dakota on Wednesday, November 10, speaking on the subject of "Factors to be Considered in Choosing Your Branch of Medical Practice."

Acknowledgement is made of the receipt from **Doctor Ronald Price**. Armour, South Dakota, of several copies of new anatomical Atlases to be on display in the Gross Anatomy laboratories for student use.

Announcement will soon be made of the program of a





Hydrochloride Tetracycline HCI Lederle

ACHROMYCIN, new broad-spectrum antibiotic, has set an unusual record for rapid acceptance by physicians throughout the country. Within a few months of its introduction, ACHROMYCIN is being widely used in private practice, hospitals and clinics. A number of successful clinical tests have now been completed and are being reported.

ACHROMYCIN has true broad-spectrum activity, effective against Gram-positive and Gram-negative organisms, as well as virus-like and mixed infections.

ACHROMYCIN has notable stability, provides prompt diffusion in body tissues and fluids.

ACHROMYCIN has the advantage of minimal side reactions.



postgraduate medical conference to be held at the medical school on April 2, 1955.

* * *

Two members of the medical school faculty have recently received research grants from the National Institutes of Health. They are **Doctor John Fodden** who has received a grant in the amount of \$4,000.00 for the purpose of procuring equipment which will be devoted to the study of certain factors effecting the human diabetic.

Doctor Earl B. Scott. Associate Professor of Anatomy, has received a grant in the amount of \$10,000.00 for a continuation of his studies dealing with the histopathology of amino acid deficiency.

AMERICAN BOARD OF OBSTETRICS AND GYNECOLOGY

The next scheduled examination (Part 1), written examination and review of case histories, for all candidates will be held in various cities of the United States, Canada, and military centers outside the continental United States, on Friday, February 4, 1955.

Case Abstracts numbering 20 are to be sent by the candidate to the Secretary as soon as possible after receiving notification of elegibility to the Part I written examination.

ARIZONA CANCER MEETING SET

The third annual Cancer Seminar presented by the Arizona Division of the American Cancer Society and the Arizona Medical Association will be held at the Paradise Inn, Phoenix, Arizona from January 13th through the 15th.

The registration fee is \$5.00 and the applications can be made to American Cancer Society, Arizona Division, 1429 N. First Street, Phoenix, Arizona.

The program will discuss cancer of the gastrointestinal tract, Bone Tumors, Cancer of the Breast, Cancer of the Female Genital Tract, and Cancer of the Genitourinary Tract.

FORENSIC GROUPS TO MEET IN L.A.

The Seventh Annual Meeting of the American Academy of Forensic Sciences will be held in the Biltmore Hotel in Los Angeles on February 17, 18, 19, 1955. The Presi-

dent of the Academy this year is Dr. A. W. Freireich, Malverne, New York and the Chairman of the Program Committee is Dr. Milton Helpern, Chief Medical Examiner of the City of New York. The Law Department of the American Medical Association has long urged that the profession take an increasing interest in medicolegal problems and the programs of the Academy meetings are a definite step in that direction. Further information may be obtained by writing Dr. W. J. R. Camp, University of Illinois College of Medicine, 1853 W. Polk Street, Chicago. Illinois, Secretary, or Dr. Frederick D. Newbarr, 109 Hall of Justice, Los Angeles 12, California, Chairman of Local Committee on Arrangements.

Largest Heart in the World



WORLD'S LARGEST HEART is a walk-in model, 17½ feet high and 28 feet long, at Philadelphia's Franklin Institute. An internal pathway enables visitors to make a "corpuscle tour" as they walk through the various valves and chambers. Designed to advance the public's knowledge of the human heart, the giant replica also calls attention to the problem of the heart diseases, which your 1955 Heart Fund contribution will help to fight. Send your gift to your local Heart Association, or to "H-E-A-R-T," care of Post Office.



HAROLD S. BAILEY, PH.D.
EDITOR
Division of Pharmacy
College Station, South Dakota



EXPANSION OPPORTUNITIES FOR YOUR DRUG STORE*

Robert Buchanan**

It seems appropriate to introduce my topic by presenting certain facts and figures about the economic health of the state of South Dakota. These figures show that business is good and we should all have a spirit of optimism.

First, the population of the state as of January 1, 1954 is 654,000. This represents a $1\frac{1}{2}$ increase over 1950.

Secondly, concerning the sales picture for the first four months of this year, we have an increase of 2%. Also, bank debits are up 4 per cent. Bank debits, as you know, are the checks written against commercial and private checking accounts. It is an indication of commercial activity and an increase of 4% is similar to that of other states.

Building permits are up 5 per cent in South Dakota. That is also an indication of a healthy economic situation in the state.

The Federal Reserve Bank in Minneapolis states that for the first six months of 1954, taxable farm income was up 23 per cent. In 1953, the total taxable farm income was also up, with livestock advancing 72% and crops 28%.

York Langton mentioned in his address at the Annual Banquet that there are great changes coming. I feel certain that these changes will expand all types of business ac-

*A transcript revised for publication of an address presented to the South Dakota State Pharmaceutical Association Convention, Aberdeen, 1954. General Manager, Northwestern Drug Company,

Minneapolis, Minnesota.

tivities. Naturally the retail druggist is going to get his share.

Let us look at some of the trends in business and economics that are existing nationwide. In some instances the data may not apply to South Dakota, as yet. However, the trends will affect South Dakota in the near future.

Population Growth Affects Druggists

The tremendous growth in the population of this country is bound to have an effect on our profession. The population increased from 132,000,000 in 1940 to an estimated 161,000,000 in 1953. This rate of growth will give our country a population of 180,000,000 by 1960.

Since 1947, we have averaged 3½ million births each year. In 1953, we had 4 million births. The meaning of this to the retail druggist is plain. With the increase in births and the population increase we are going to have more doctors, more hospitals and need more medication. Also, if you men are not featuring baby departments, we recommend that you do. If you are not featuring toys, we recommend that you set up a toy department for these new babies.

When we study the distribution of population in various age groups and compare the population for the years 1940 and 1953, we note that there has been a 65% increase in the number of children under five since 1940. In the five to nine age group, there has been a 50% change in the number of children from 1950-1953. The total of those under nine years

old represents 20% of our population. Since there has been a 57% increase in the population under nine years of age, this portion of our population represents a challenge and a definite possibility for increasing the sales volume in the prescription, baby and toy departments. You probably have heard many times that each new birth is worth \$100 a year to the retail druggist.

In the age group 10-19, we have a decline in the number of people. This is due to a lesser number of birth during the depression era.

There is a 13% increase in the 60 years and over age group. The increase is from 13 million in 1940 to 19½ million in 1953. Here is another possibility for growth in your store. A department should be set up for this group in the store.

Drug Business Should Increase 20%

What portion of the national income do you as a druggist obtain? After taxes, the retail druggist received 2.6% of the national income in 1939. In 1953, he received 1.9% of the national income. Most of our products are needed and are necessities in order to maintain our standard of living. For this reason we naturally would not take as big a loss as a business dealing more in luxuries.

However, if we are to get our fair share of the 1954 American dollar, we should increase our drug business 20%. That is a tremendous increase in business and, yet, if we drug merchants would advertise properly, display properly and use other proper merchandising methods, we would increase our business 20% with the purchasing power of the nation what it is today.

The average retail druggist in South Dakota has tripled his sales since 1937. However, the figures quoted indicate that we have left something undone.

Clerks Must Have Incentive

Let us discuss what we can do as retail pharmacists to obtain our share of the national expendable income and purchasing power.

First of all, we feel that we pay our clerks well today and that they should work a 48 hour week diligently and produce every minute. But, we are only kidding ourselves. Your clerks and managers must have an incentive or they will tend to loaf. If you have a manager for your store, give him a per cent of the profit at the end of the year. Make him

feel that he has to work to get an extra dollar.

Do the same with the clerks. If you have a drive on Dr. West's toothbrushes, for example, pay a bonus for each brush sold. Your clerks will then feel part of the team. Having an incentive is all important.

Never hire a man who wants to work for a salary. Such an individual wants to get in a rut and stay there. Be practical and give your store clerks an incentive.

Utilize Space Properly

The average sales per square foot in drug stores in the United States is \$70. This is probably close to the figure for South Dakota, also.

The average for chain stores is much higher and chain stores are working every available square foot. For example, you can walk into a Walgreen drug store, look at the length and width of the store, obtain the square feet of space, multiply by 100 and arrive at the store sales. The Walgreen chain stores have sales from \$100 to \$125 per square foot of space.

Try to utilize all your space. If some department is not functioning properly, tear it up, rebuild or get rid of it. Dayton's of Minneapolis maintain a carpenter department specifically to remodel store departments. Dayton's holds the view that a customer gravitates toward a new department.

In connection with this subject, I want to mention displays. Remember displays must be effective. There are 150 million people visiting the drug stores of our nation each week and 80% of all the merchandise sold these people is sold by touch and sight.

Boost Prescription Accessories Sales

There are six departments of your store which you can build up and feature in order to collect a greater share of the national expendable income.

First of all, we usually think we do a pretty good job selling prescription accessories. Accessories go hand in hand with the prescription business. However, a recent "Drug Topics" survey states that the retail druggist is only receiving about 35% of the thermometer business. In other words, 65% of the thermometer sales are made by someone outside our profession. This means we are not doing the merchandising job we are capable of doing. In 1953, we druggists sold 54 million dollars of prescription accessories and that is only 27% of the available business.

Now let's look at cosmetics and toilet goods. The cosmetic department of your stores did 88 million dollars worth of business in 1953. This amounts to only 29% of the available business. On other toilet goods we received 17% of the available business.

I don't have to tell you where the business is going. You know that every super-market, grocery store, variety store and dime store carries the merchandise you are trying to sell. The druggist no longer has a monopoly on cosmetics or the toiletry business and we are going to have to fight for what business we get and fight to retain the business we have in this department.

As advertising continues to plug new and old products, there will be more and more buyers. However, the consumer will buy these products where they are readily available. They will buy a Toni in a gasoline filling station if it is handy.

Three other departments in which our business can be greatly improved are baby products, veterinary products and photography. Drug stores received only 29% of the available baby products business and 33 1/3% of the veterinary product's business in 1953. Some of you are featuring veterinary products, however, more of you should build up this department. If you are not working on increasing your sales in this area, consider attending one of the fine courses on animal health products.

Many of our druggists have a hobby of photography. The possibilities in this field are tremendous and we urge you to build up this department. Some stores have built up the photography department rather than have a soda fountain.

Plus and Minus Factors in Merchandising

There are several factors on our side (plus factors) in the merchandising game. You have heard statements made that the consumer has confidence in the retail druggist. According to all surveys, the number one reason that a consumer trades at your store is because he has confidence in you. This is a plus factor no one can take away. Next to the doctor, the pharmacist is the patient's best friend. You are a respected citizen and render a service that no one else can. You are also a better educated merchant and your clerks are better educated. It is no secret that in retail phar-

macy we employ the best type of people.

What are the minus factors? First of all, our store personnel lack the ability to get the consumer to buy a larger size of an article or to buy more. We lack the ability to make suggestive sales. You can go into any store and see the clerk wrap up the article asked for and say nothing more. We never seem to get around to suggestive selling; we never get around to trading up on the dollar; we never get around to making companion sales. When an average consumer buys just one item from you and walks out without a second, you haven't done your job.

About 52% of the sales made in a variety store are impulse items. I think the figure should be higher, but that is what we are told. I do not know the percent of impulse items in a drug store, but I am willing to state that it isn't 8%. We are not properly training our clerks in selling techniques.

Another minus factor is the lack of space in drug stores. We do not have adequate space to properly display merchandise. It has only been in the past fifteen years that we have made any effort to get merchandise out on island units to make displays. The days of doing business off of our shelves are gone forever.

Not enough light in your store is another important minus item. Light is an advertising cost. If a store is well lighted, people will come into that store. They are not going to do business in a store where they have to stumble over boxes to get to the clerks.

Another factor to be taken into consideration is the type and class of people that trade at your store. You must know your public.

The educational level of our population has changed. In 1920, only 7% of the population had a high school education. In 1930, with everyone becoming more interested in education there was an increase to 13% of our population who had a high school education. In 1940, the increase went to 27% and in 1953, 41% of our population were high school graduates.

What does this increase in the educational background of the population mean to the druggist? With a higher educational level, people have better jobs and are more able to buy better merchandise.

(Continued on Page 462)



LILLY DIGEST COST FINDER

Many a druggist, looking over his 1953 profit and loss sheet, has asked himself, "How well am I controlling my costs?"

He has wondered whether he's doing as well as other stores in the same class of gross annual sales and in cities of the same size.

Perhaps he's also asked, "How much better could I do if I applied the best operating methods?"

Now all he has to do is ask the Eli Lilly and Company salesman or service wholesaler salesmen. The salesmen have the answers at their fingertips. The answers are given by the Lilly Digest cost-finder — a device that looks and operates somewhat like a circular slide rule.

The cost-finder has an outer disk divided into seven categories of stores, based on annual sales. The categories range from stores with less than \$30,000 a year in sales to those grossing more than \$200,000 in sales.

Each of the seven categories has seven subcategories, based on size of city. The cities range from under 2,500 population to those of more than 500,000.

Suppose the druggist tells the Lilly salesman his annual sales run between \$75,000 and \$100,000. The store is situated in a city of 35,000. The salesman turns the arrow of the cost-finder's inner disk to the proper sales category and to the population class for cities of 20,000 to 50,000.

In the window in the yellow upper half of the inner disk appears the average operating figures for Lilly Digest drug stores in the category. They were taken directly from the twenty-second annual Lilly Digest, recently released. They tell the druggist the minimum he should achieve.

The data given cover merchandise inventory (in thousands of dollars), turnover rate, and (in percentage of sales) cost of merchandise sold, proprietor's salary, employees' wages, rent, miscellaneous expenses, and net profit.

In the window in the green lower half of the inner disk appear the average operating figures for **Lilly Digest** drug stores of the category with net profits of more than 10 percent of total sales. These figures are the goal toward which the druggist will work. He knows it is a practical goal because similar stores actually have achieved it.

The druggist learns, for example, that top stores in the \$75,000-\$100,000 category for cities of 20,000-50,000 report average net profits of 12.7 percent, an increase of 7.2 percent over the average net profit for all stores in the category. It's done through better cost control.

The question then comes up: "How can a druggist achieve this better cost control?"

Again the Lilly salesman has the answer at his fingertips. On the back of the cost-finder is a set of rules for efficient operation. Thus, the cost-finder is the essentials of the annual Lilly Digest report in simple, easy-to-use form.

\$60-MILLION YEARLY RESEARCH BY PHARMACEUTICAL INDUSTRY

America's pharmaceutical industry is spending approximately \$60,000,000 a year for research, John A. MacCartney of Parke, Davis & Company told the American Pharmaceutical Association at its 101st annual convention in Hotel Statler, Boston. "New research laboratories have been built, or are planned, by practically every major pharmaceutical manufacturer."

"The reason is two-fold: First, the passing years amply demonstrate the fundamental soundness of a heavily-financed and adequately-staffed research installation. Second, research tends to be a self-perpetuation effort. Each new discovery opens new avenues of problem approach and new vistas of jobs to be done."

The Parke-Davis trade relations manager, who also is retiring first vice president of the A.Ph.A., said, "The very achievements so far made by research in the control and elimination of infectious diseases have only served to accentuate the problems of degenerative diseases and those pathologic conditions which primarily affect the older age group.

"It is not too much to hope that with adequate research investment — and in spite of the four-to-one gamble it represents — we will, in the immediate years ahead, see def-

inite control or cure for some of mankind's most malicious diseases.

"Poliomyelitis appears to be high on the list of those diseases which will soon be controlled. The problem of the common cold and cancer will be solved. Heart diseases will no longer eliminate the high percentage of our mature population which it does today," he said.

MacCartney pointed out to the delegates that tuberculosis, once the number one killer, already had yielded to research developments.

"Leprosy, typhus, malaria and other world scourges are being rapidly controlled and may one day be merely textbook curiousities," he added.

The Parke-Davis official brought out that the pharmaceutical industry through research had gained "a new and better recognized status as professional people and an important element in the progress of medicine."

"In fact," MacCartney added, "the 'gifts' of pharmacy have greatly improved the present-day practice of medicine. Most of these 'gifts' have emanated from the great research laboratories which this industry has privately financed and privately supported."

FAIR TRADE BUREAU TO STRESS VITAL ROLE OF ESTABLISHED RETAILING

Bureau Begins Sixth Year As Steering Committee Votes To Continue Program

A nation-wide campaign stressing the vital economic and social role of established retailers in the United States will be a highlight of the program planned by the Bureau of Education on Fair Trade during the coming year, according to Dr. John W. Dargavel, Bureau chairman, and executive secretary of the National Association of Retail Druggists.

The Bureau's campaign is designed to "help combat widespread price-chiseling and unfair competition by building awareness of the indispensable contributions of the established retailer to the well-being of U. S. communities

and to effective mass distribution based on methods of fair competition," Dr. Dargavel said. Local programs of this type are already under way, he added, citing steps to combat discount house selling which are now being taken in California by the Chambers of Commerce of San Bernardino and Culver City.

The Bureau began its sixth year of operation this month, following a unanimous vote by its Steering Committee to continue the non-profit organization's program in behalf of the fair trade laws. The Bureau's budget for 1954-55 will be \$120,000, as in each of the previous five years, Dr. Dargavel said, and will be raised from all segments of the drug industry.

The funds will support the Bureau's broad program of information, education and research, including a reporting service on the economic, legal and social aspects of fair trade to all industries using fair trade. The Bureau was organized in 1949 by the National Association of Retail Druggists and operates under its direction, with the objective of developing public understanding and support of the fair trade laws as instruments to preserve fair play over the counter.

Members of the Bureau's Steering Committee, in addition to Dr. Dargavel, include: Charles S. Beardsley, chairman of the board, Miles Laboratories, Inc.; Henry Bristol, chair-

man of the board, Bristol-Myers Co.; Philip Cortney, president, Coty, Inc.; W. Rutherford James, president, Towns and James, Inc.; Harry A. Kimbriel, vice-president, Eli-Lilly & Co.; Paige L'Hommedieu, chairman of the board, Personal Products Corp.; William J. Murray, Jr., chairman of the board, McKesson & Robbins, Inc.; E. Allen Newcomb, executive secretary, National Wholesale Druggists' Association; Ray C. Schlotterer, secretary, Federal Wholesale Druggists Association; Carl H. Willingham, secretary, National Association of Chain Drug Stores. Maurice Mermey serves as director of the Bureau.

ENFORCEMENT OF FAIR TRADE UP TO MANUFACTURERS

Bureau Newsletter Sees High Court Action As Reaffirmation Of Decisions Upholding Fair Trade's Constitutionality

The United States Supreme Court's dismissal in November of four appeals challenging the constitutionality of the fair trade acts "has far-reaching implications, not only for future state court decisions on fair trade, but also for the more effective use of fair trade in the marketplace," according to the current issue of the Fair Trade Newsletter, published by the Bureau of Education on Fair Trade.

Hailing the high court's action as a reaffirmation of the established constitutionality of the fair trade statutes, the publication says: "The issue of fair trade enforcement has been put in a new light. There is now no question about the legal validity of the statutes under which manufacturers can proceed vigilantly against destructive price-chiseling.

"From now on more effective enforcement of fair trade contracts than in recent years may be anticipated," the **Newsletter** continues. "Manufacturers are re-examining their fair trade programs, and retailers in various sections of the country who have been damaged by fair trade violators are considering omnibus suits against them. Such suits would cover a store-wide range of price-footballed brands instead of just one trademarked product.

"With the new reaffirmation of fair trade's constitutionality, national brand manufacturers must now come to a firm decision as to whether they want to protect their trademarks and their distribution systems by enforcing fair trade to the hilt; or whether they

want to abandon it altogether," the publication points out. "The halfway-house position hurts everybody, except the price-chiseler. Retailers will be watching with renewed interest the activities of their fair-trading manufacturer-suppliers."

Noting that this is the third time within a year that the high court has refused to review the constitutional aspects of fair trade, the Bureau **Newsletter** points out that the arguments against fair trade advanced in the dismissed appeals were all rejected in the line of decisions upholding the constitutionality of the fair trade statutes and that these decisions, one of them going back 18 years, have been given new emphasis by the Court's latest action.

In dismissing the two appeals challenging the constitutionality of the New York and New Jersey fair trade laws (S. Klein v. Lionel Corp. and Grayson-Robinson Inc., v. Lionel Corp.), "for want of a substantial Federal question," the Supreme Court "has again refused to consider the assertion that state fair trade laws transgress the due process clause of the Constitution of the United States," the Bureau publication notes.

"This position is at sharp variance with the position taken by several lower state courts recently which have held that their state fair trade laws violate their state constitutions. "The due process clauses of the various state constitutions do not differ appreciably, if at all, to our knowledge from the due process clauses of the Fifth and Fourteenth Amendments to the Constitution of the United States."



MYCOSTATIN (SQUIBB NYSTATIN)

Description: Mycostatin is the first broadly effective antifungal antibiotic available to the medical profession. It is derived from cultures of Streptomyces noursei.

Action and Indications: Mycostatin inhibits or kills all species of fungi and yeasts tested, except actinomycetes. Against Candida albicans (monilia) 1 unit or less per milliliter is effective.

Its greatest effect is on yeast-like fungi in the growing stage; it is less active against spores and is inactive against bacteria. Mycostatin is poorly absorbed from the digestive tract and, when taken by mouth, exerts its effect against yeasts present in the lumen of the intestine.

Mycostatin is recommended for the prevention and treatment of intestinal moniliasis. Candida albicans infection is enhanced with oral antibiotics. Since it eliminates or greatly reduces the number of Candida in the stools, Mycostatin is useful to prevent or treat infection of the lower intestine and anus caused by this organism. It is indicated for patients treated with oral antibiotics, especially when such treatment is intensive or protracted. Mycostatin is also recommended for the prevention of intestinal moniliasis in intestinal surgery.

No serious side effects or allergic reactions have occurred. Nausea and diarrhea have been reported after large doses, but gastrointestinal irritation is very rare with the usual dose.

Dosage: The usual dose is one 500,000 unit tablet three times daily. If intestinal fungi are not adequately suppressed, the dose may be doubled.

How Supplied: Bottles of 12 and 100 tablets of 500.000 units.

Source: E. R. Squibb, New York.

STECLIN HYDROCHLORIDE

Description: Steclin Hydrochloride is Squibb Tetracycline Hydrochloride.

Action and Indications: The antimicrobial action of Steclin is that of tetracycline hydrochloride. It is recommended for infections caused by most gram-positive and gramnegative bacteria.

Dosage: Minimum daily dose is 250 mg. four times a day for adults; in children the suggested minimum daily dosage is 20 mg. per Kg. of body weight, in divided doses. Therapy should usually be continued for 24 to 48 hours after all signs of infection have subsided

How Supplied: 50 and 100 mg. capsules, bottles of 25 and 100; 250 mg. capsules, bottles of 16 and 100.

Source: E. R. Squibb, New York.

COGENTIN

Description: A new drug for the relief of parkinsonian tremor and rigidity.

Indications: Recommended for use in the symptomatic and palliative treatment of all etiologic groups of Parkinson's syndrome—arteriosclerotic, postencephalitic, or idiopathic. Therapy is directed toward control of disturbing symptoms to permit the patient maximum integration of function and a minimum of discomfort. Extensive muscular rigidity, muscle spasm and contracture may be overcome with cogentin. The characteristic gait, facies and posture return to normal. The drug helps relieve sustained rigidity, discomfort and restlessness during sleeping hours and the aches

and pains associated with rigidity are relieved.

The reduction of tremor in many patients treated with Cogentin is so definite that many self-care activities are greatly facilitated.

Cogentin may be given alone or in conjunction with other drugs. It is suggested that Cogentin be given simultaneously with another drug to control a specific condition like rigidity, if the patient has been taking the other drug. Therapy with other agents should not be terminated abruptly when Cogentin is administered.

Dosage: May be administered once daily upon retiring, particularly when used in conjunction with other drugs.

How Supplied: Bottles of 100 and 1000 tablets. **Source:** Sharp and Dohme, Philadelphia.

'AERODRIN' INTRANASAL SOLUTION NEW PACKAGE ANNOUNCEMENT

Description: Each cc. contains 'Aerosporin' Sulfate brand Polymyxin B Sulfate, 5,000 Units; Neomycin Sulfate, 5 mg. (equivalent to 3.5 mg. neomycin base); 'Vasoxyl' Hydrochloride brand Methoxamine Hydrochloride, 5.0 mg.; in an aqueous, isotonic solution, pH 5.5.

Action and Indications: Antibacterial — decongestant — bland and pleasant to use. Bactericidal to gram-negative and grampositive organisms; does not cause central stimulation nor impair ciliary action.

For treating engorgement or infection in the nose, nasopharynx or sinuses; also for symptomatic relief and prevention of infection in allergic rhinitis.

How Supplied: Plastic spray-bottle containing ½ fl. oz.

Source: Burroughs Wellcome, New York.

ACYLANID

Description: Acylanid is a new crystalline digitalis cardiac glycoside, acetyldigitoxina, prepared by a step-by-step enzymatic degradation of the naturally occurring glycoside from Digitalis lanata.

Action and Indications: Acetyldigitoxin is useful for oral digitalization, and for the maintenance treatment of such cardiac conditions as:

a. cardiac failure with regular rhythm, fibrillation, flutter and rheumatic heart disease;

b. failure associated with arteriosclerosis.

hypertension, valvular diseases, myocardial degenerative disease and coronary insufficiency:

c. paroxysmal tachycardia and paroxysmal auricular fibrillation with or without failure.

The safety margin of acylanid is quite adequate since the minimum toxic dose is more than twice the average therapeutic dose. In addition, the first manifestation of toxicity is usually nausea and vomiting; whereas, with digitoxin arrhythmias frequently precede the development of nausea and vomiting.

Dosage: For rapid oral digitalization (24 hours) the dosage range is 1.2-3.0 mg. within 24 hours in single or divided doses. The average dose is 2.0 mg. within 24 hours.

For slow oral digitalization the dosage range is from 0.6-1.4 mg. (average 1.0 mg.) daily for 2-6 days.

For maintenance the dosage range is from 0.1 mg. to 0.3 mg. daily (average 0.2 mg. daily).

It takes about 2 hours before the first digitalis effects become apparent.

How Supplied: Acylanid is available in two strengths, 0.1 mg. (pink) tablets and 0.2 mg. (white) tablets in bottles of 100, 500 and 1000.

Source: Sandoz Pharmaceuticals, Hanover, N. J.

PENTIDS CAPSULES

Description: Capsules containing 200,000 units of Soluble Penicillin G potassium for infants and children.

Indications: When penicillin therapy is indicated in infants and children.

Dosage: The contents of one of two capsules are added to 2 ounces or less of milk, infants' formula, fruit juice, cola, ginger ale, or similar vehicles. The solution should be taken immediately after the penicillin is added. To be taken three times a day. Pentids capsules are stable at room temperature for at least 36 months.

How Supplied: Bottles of 24 and 100 capsules. **Source:** E. R. Squibb, New York.

TOLSERAM

Description: A new muscle relaxant, mephenesin carbamate, supplied in tablet and syrup form.

Indications:

1. In muscle spasm of rheumatic disorders

and allied conditions.

- 2. In neurologic disorders where there is skeletal muscle spasm.
- 3. In drug addiction and alcoholism as an adjunct to control tremor and muscle tension during withdrawal.
- Dosage: The usual adult dose is 1 to 3 grams (two to six 0.5 gram tablets, or one to three teaspoonfuls of Tolseram Suspension) repeated three to five times a day as indicated.

How Supplied: Tablets, 0.5 Gm., bottles of 100. Suspension, 1.0 Gm. per teaspoonful, peppermint flavored, bottles of 1 pint.

Source: E. R. Squibb, New York.

ANSOLYSEN

Description: Ansolysen (pentolinium tartrate) is a new ganglionic blocking agent.

Action and Indications: It acts by blocking sympathetic nerve ganglia which decreases peripheral resistance and lowers blood pressure.

Ansolysen is effective in the management of moderately severe, severe and malignant cases of hypertension.

Dosage: Dosage must be individualized. Oral administration: Doses of Ansolysen should be given at eight-hour intervals. The first dose of the day should be given after a good breakfast. Average starting dose is usually 20 mg.; this may be increased by increments of 20 mg. until desired response is obtained, after which dosage may remain relatively unchanged.

How Supplied: Tablets 40 mg. bottles of 100 100 mg. bottles of 100

Source: Wyeth Laboratories, Philadelphia.

THIOMERIN SUPPOSITORIES

Description: Suppositories Thiomerin sodium (mercaptomerin sodium) makes available Thiomerin, a diuretic agent, for administration by rectum. They are non-irritating and particularly valuable when medication is to be taken over a prolonged period as in the maintenance management of chronic edema. Each suppository contains 0.5 Gm. mercaptomerin sodium (equivalent to 165 mg. mercury) in a cocoabutter base with white wax.

Indications: Thiomerin Suppositories may be used in patients with edema resulting from congestive heart failure, cirrhosis of the liver, nephrosis and in carefully selected cases of subacute and chronic nephritis.

Dosage: The usual dose is one suppository daily after defecation.

How Supplied: Box of 12 suppositories. Source: Wyeth Laboratories, Philadelphia.

TARGOT MASTITIS OINTMENT

Description: Targot Mastitis Ointment is a combination of Aureomycin, neomycin, dihydrostreptomycin and penicillin in an oil base.

Indications: For the treatment of bovine mastitis. Because Targot is in an oil base that is not soluble in milk, the product maintains effective contact with the infected udder tissue. Unlike water-soluble ointments, Targot remains largely in the udder and is not withdrawn and lost when the quarter is milked. Tests indicate this staying power is effective up to 72 hours.

How Supplied: In one quarter ounce tubes with a convenient udder infusion tip.

Source: Lederle Laboratories, New York.

CORICIDIN WITH PENICILLIN SOLUBLE POWDER

Description: A liquid oral penicillin preparation containing the antihistamine Chlor-Trimeton and the antipyretic sodium salicylate.

Action and Indications: The product is intended for all infections which respond to oral penicillin. It contains potassium penicillin G which has been recognized as the preferred type of oral penicillin. The use of oral penicillin appears to be associated with a far lower incidence of penicillin reactions than the injectable form of the antibiotic. In addition, the product contains the antihistamine Chlor-Trimeton for its antiallergic action. Since Chlor-Trimeton Injection has been used for several years to treat or prevent penicillin reactions, the presence of the drug in this preparation is intended to suppress such common allergic reactions as skin eruptions and itching, tearing of the eye and nasal engorgement.

Sodium Salicylate helps to control associated fever. This action is particularly desirable in the therapy of infants and children

Source: Schering Corporation, Bloomfield, N. J.

SEBIZON

Description: Antiseborrheic. A lotion containing 100 mg. sodium sulfacetamide (**p**-aminobenzene-sulfonylacetylamide) per gram.

Indications: Containing Schering's sodium sulfacetamide which exerts a powerful bacteriostatic effect against the organisms commonly isolated from cutaneous pyogenic infections, Sebizon is effective in controlling scaling dermatoses such as dandruff, acute and chronic seborrheic dermatitis, and bacterial infections of the skin. It not only is indicated in primary and secondary cutaneous bacterial infections, but promptly relieves the itching in common dandruff.

Dosage: Lotion should be applied to the hair at bedtime and allowed to remain over night. Its application should be preceded by a shampoo if the hair and scalp are oily or greasy. Initially treatment should be repeated eight to ten times. Thereafter, application should be repeated once or twice weekly, or every other week, depending upon severity of condition, to prevent recurrence.

How Supplied: 4 oz. plastic squeeze bottle with applicator.

Source: Schering Corporation, Bloomfield, N. J.

PAMINE WITH PHENOBARBITAL DROPS

Description: A solution containing 20 mg. phenobarbital and 0.5 mg. Pamine (methscopolamine bromide) per cc.

Indications: For treatment of the wide variety of infant gastrointestinal disturbances known as "colic" and in cases of pylorospasm in infants when pyloric stenosis has not been definitely established.

Dosage: Orally by dropper.

How Supplied: Dropper bottle containing 15 cc.

Source: The Upjohn Company, Kalamazoo, Mich.

PAMINE BROMIDE SYRUP

Description: A syrup containing 1.25 mg. Pamine (methscopolamine bromide) per 5 cc.

Indications: Treatment of peptic ulcers.

How Supplied: Four oz. bottles.

Source: The Upjohn Company, Kalamazoo, Mich.

ALKETS

Description: Tablets containing 12 grs. calcium carbonate, 2 grs. magnesium carbonate and 1 gr. magnesium oxide.

Indications: Relief of gastric distress caused by excess acidity, and as an adjunct to Pamine therapy for peptic ulcers.

How Supplied: Bottles of 100 tablets.

Source: The Upjohn Company, Kalamazoo, Mich.

PENASOID SUSPENSION WITH TRIPLE SULFAS

Description: A chocolate-flavored suspension containing in each teaspoonful 300,000 units of potassium penicillin G and 0.17 gm. each of sulfadiazine, sulfamerazine and sulfamethazine.

Indications: A combination of penicillin and sulfonamides often appears to be more effective against susceptible bacteria in lower dosage than either of these drugs alone and bacteria that are relatively resistant to either penicillin or sulfonamides are often sensitive to the combination.

For treatment of lymphadenitis, otitis media, scarlet fever, tonsillitis, mastoiditis, erysipelas, gonorrhea, acute sinusitis, and urinary tract and certain other infections.

In addition Penasoid Suspension With Triple Sulfas may be used to guard against secondary infection by susceptible organisms in patients undergoing tonsillectomy, tooth extraction, or other ear, nose and throat surgery.

Dosage: Depends upon the patient's age, severity of infection and physician's judgment. However, the following are suggested dosage: Children under 1 year: 2 teaspoonfuls initially, then ½ teaspoonful every 6 to 8 hours; 1 to 5 years: 4 teaspoon initially, then 2 teaspoonfuls every 6 to 8 hours; 6 to 12 years: 6 teaspoonfuls initially, then 2 teaspoonfuls every 6 to 8 hours; and adults: 6 to 8 teaspoonfuls initially, then 2 teaspoonfuls every 6 to 8 hours.

How Supplied: 60-cc. bottles. Source: Parke-Davis. Detroit.

"When a manufacturer creates new customers and new sales for me — I'm sold. That Julius Schmid campaign to alert doctors about the male as a source of reinfection in Trichomonas vaginitis will mean a lot more sales and new customers for my store. I read it in their latest ad in Drug Topics. I'm featuring XXXX FOUREX, (R) RAMSES, (R) and SHEIK. (R) They've earned it."



PROFESSIONAL INTEGRITY QUESTIONED BY RULING

The Department of Health and the Board of Pharmacy of the State of Maryland have recently issued a ruling which would seem to question the integrity of Maryland pharmacists, as well as upset one aspect of the physician-pharmacist-patient relationship.

The ruling requires the pharmacist to label prescriptions calling for legend drugs in such a manner as to inform the recipient of the original prescription that it is non-refillable. Prescriptions for non-legend drugs do not need to be labeled in this manner.

The bad feature of this ruling is that it points out to the public that the physician has in one case prescribed a drug obtainable only on prescription, whereas, in the other case he has prescribed a drug which may be purchased without a prescription. In the latter case the patient would not have to revisit the physician in order to obtain more of the drug. This would lead to self-medication and the patient would not have the contact with the physician desirable for successful therapy.

It is also no service to the public to call attention to the fact that a legend drug has been prescribed, thereby emphasizing the fact that he is receiving a dangerous or highly potent drug.

For several centuries pharmacists have recognized their responsibility in not disclosing the contents of a prescription to the patient. That is the prerogative of the physician, if he so desires. The psychology of this procedure is well-known. It may generate considerable anxiety in the minds of patients who obtain a drug which may be habit-forming,

toxic or otherwise dangerous for the first time, because it point out to them the fact that the physician found it necessary to prescribe such a drug in the treatment of their case.

In addition it is most disturbing to note that the State of Maryland shows little confidence in the integrity and professional capacity of its pharmacists when it compels them by law to announce to the patient what every reputable pharmacist would say to that patient at the time a refill is requested.

Since many State Departments of Health do not have pharmacists at the policy-making level and, therefore, may not be aware of the professional prerogatives and obligations of pharmacy, this ruling is not surprising from that quarter. However, the State Board of Pharmacy also issued the ruling which would tend to alter one of the services of pharmacy to the public and the medical profession. It would seem, therefore, that the profession in the State of Maryland is intent on destroying itself.

It is bad enough to have the Federal Food and Drug Administration questioning the integrity of the pharmaceutical profession through its enforcement methods without having this integrity questioned by the individual states.

The individual states already have direct control over the professional functions of the pharmacists through the power of inspection and suspension or revocation of the license to practice. It would appear that the Maryland ruling is unnecessary and most unfortunate.

PHARMACY Rews

A.Ph.A. STUDENT BRANCH MEETS

Over 100 members of the Student Branch of the American Pharmaceutical Association attended the regular monthly business meeting November 9 on the State College campus.

Plans were made for a social Christmas meeting on December 8 to which pharmacists in the Brookings area will be invited. In place of the traditional gift exchange between students, each member will contribute at least 25c with the total contribution being sent to buy several CARE packages.

WILSON ADDRESSES RAPID CITY PHARMICS

Problems in Pharmacy were discussed by Bliss C. Wilson, Secretary of the South Dakota State Pharmaceutical Association, at the November meeting of the Rapid City Pharmaceutical Society.

Wilson compared pharmacy laws enforced by the South Dakota Board of Pharmacy with pharmacy laws of other states. He also spoke on the qualifications of a pharmacist and registration of pharmacists.

Also a guest of the Society

was Glenn Vileau, State Drug Inspector from Sioux Falls.

During the business session plans for the post session Doctors-Pharmacists Party were discussed and arrangements for this event were placed in the hands of the entertainment committee.

The Rapid City Pharmaceutical Society holds a regular monthly meeting on the first Tuesday of the month at 10:00 P. M. The November meeting was held at the Harold Mills home and was arranged by the November Committee consisting of Mr. Mills, Miss Georgia Baker and Miss Mary Ann Kohler.

SERVICES HELD FOR C. C. MAXWELL

Funeral services were held October 20 for C. C. Maxwell, 92, who died after a brief illness.

He opened a drug store in Arlington (then Nordand) in 1884 and operated it until his retirement four years ago. Mr. Maxwell held license No. 4 under the state pharmacy law. He assisted in organizing the South Dakota State Pharmaceutical Association and the Mutual Druggists Fire Insurance Co., and served as president of both organizations.

PHARMACY STUDENTS NAMED TO WHO'S WHO

Four Division of Pharmacy, South Dakota State College students will be listed in the annual directory "Who's Who Among Students in American Colleges and Universities."

Selection is based on scholarship, leadership, participation in extra-curricular and academic activities, citizenship, service to school and promise of usefulness to business and society.

The dean of each division in a school is given a quota based on enrollment in the respective division. Recommendations are referred to a committee, composed of faculty and students, where college candidates are selected. Editors of the directory then rule on the list.

Pharmacy students selected are Floyd Bly, Brookings; Sheldon Murphy, Forestburg; Betty Olson, Ft. Pierre; and Robert Voy, Dell Rapids.

DOCTORS APPROVE LEDERLE SYMPOSIA

Reactions of family physicians to 30 medical symposia in 17 states, sponsored by Lederle Laboratories Division, American Cyanamid Company, offer evidence of an important step forward in fostering ever closer relations

between the medical and pharmaceutical fields.

A contribution to postgraduate medical education, the Lederle Symposium Program is co-sponsored by various local chapters of the American Academy of General Practice and other state and county medical societies. Many scores of unsolicited letters express appreciation to Lederle for the outstanding excellence of top ranking lecturers drawn from all coroners of the nation.

As one result, doctors have asked for more information on new drugs, and some have requested entire catalogs and other literature to help keep them abreast of progress in pharmaceutical research in the last decade. Pharmacists note the results in states where the symposia have been held not only in good will developed for the industry but in increased prescription business.

Lederle embarked on the program in 1952. The idea was that many physicians were anxious to learn more about certain subjects, but lacked time because of the press of their practice to travel to distant places for lengthy meetings. The Lederle program brings the meeting to them.

Selection of a subject is determined by the general interest expressed in the particular area. Some of those in the past: pediatrics, geriatrics, psychiatry, infectious diseases, and general office procedure.

Suggested speakers are contacted by Lederle and the schedule is made. The usual procedure is to have six speakers, three in the mor-

ning and three in the afternoon.

Not forgotten are the wives of the doctors. They are invited to the luncheon and a special social program is arranged for them in the afternoon.

Already scheduled are nineteen symposia between November 1954 and May 1955. More will be added as arrangements are completed.

MILITARY SERVICE ENDED

Lt. Alvin Auchstetter, SDSC 1952, was recently separated from military service. Auchstetter was executive officer of an ambulance company in Germany. He is from Madison, Minnesota, and he is available for a position.

1954 PHARMACY GRADUATE WED

Miss Donna Safford, daughter of Mr. and Mrs. Paul Safford, Huron, and Robert Landes, son of Mr. and Mrs. L. L. Landes, Pierre, were wed Sunday, October 17 at the First Methodist Church in Huron.

Mrs. Landes is a graduate of South Dakota State College and Landes received his Bachelor of Science in Pharmacy and commission as second lieutenant in the ROTC at State College in June.

Pharmacists attending the bridegroom were James R. Schmidt, Platte, SDSC 1954; Todd Martin, Chamberlain, SDSC 1954; and Robert Williams, Rapid City SCSC 1954.

PHARMICS RECEIVE MILITARY HONORS

Two senior pharmacy students in the army Reserve

Officers Training Corps at South Dakota State College have been designated as distinguished miliary students.

Selection was on the basis of outstanding qualities of leadership, high moral character, definite aptitude for military service, and creditable accomplishment of academic and military requirements, according to Lt. Col. J. B. Mullinix, professor of military science.

As a result of receiving the distinguished military citation, they will have the opportunity to apply for a regular army commission instead of the reserve commission most graduates of the advanced ROTC program receive.

The students who received the honor are Richard Lovass, Gary; and James Swain, Rapid City.

LEDERLE Rx COST DISPLAY

Helping the druggist handle his customers' complaints on the annoying prescription cost problem is the purpose of an eye-catching window display now available from Lederle Laboratories Division, American Cyanamid Company.

The six piece display, printed on heavy, durable paper board and easily assembled, features a five point check list of reasons why prescriptions cost so little they are effective, you get well quicker, they reduce the total cost of sickness, you live longer and they are the products of modern research and production methods. Request the display through local Lederle sales representatives.

INDEX TO VOLUME VII By Title, Subject and Author

A	. E	н
_	Early Cholecystectomy in the	Hage, W. J., M.D.
Abrams, Robert F.	Treatment of Acute	Surgical Pathology in a
Your Stake in Pharmacy's	Cholecystitis210	Small General Hospital6
Future192	Ebaugh, F. G., M.D.	Hannah, H. B., M.D.
Adams, W. E., M.D.	Psychological Essentials	Some Basic Factors in the
Differential Diagnosis and	of General Practice98	Production of Nervousness 21
Treatment of Benign	Edwich I A MD	Hassard, Howard, Esq.
Lesions at the Cardioeso-	Eckrich, J. A., M.D.	Are Malpractice Claims
phageal Junction303	Injuries to the Liver434	Droggantion Droggang
Additional Concepts in	Editorial Page Autopsy Law73	Worth While?31
Diabetes Mellitus 59	Autopsy Law	Health Education: The
Animal Health	Another View of the	Doctor as a Teacher10
Pharmacy46, 126, 378	Multiplication of Specialists157	
Annual Meeting Program110	Specialists107	I
Are Malpractice Claims	Blue Shield Grows402	Injuries to the Liver43
	Disability Plan Reopened 241	Index to Volume VII46
VV O1 011 VV 1111C 510	F.D.A. Attacks "Quackery" 151	K
Arneson, W. A., M.D.	G.G. Available on Prescription425	Knowles, Roy C., M.D.
Congential Hernia of the Diaphragm167	Prescription425	Father Time Presents the
the Diaphragm167	High School Course En-	Medical Profession with
•	rollments Decrease386	
ס	Medical Scholarships437	a Problem
Bailer Hameld C. Dh. D.	Misinformation About	Kyser, Franklin A., M.D.
Bailey, Harold S., Ph.D. The Retail Pharmacist and Public Relations332	Hospital Pharmacy294	Practical Consideration in
Public Polotions 222	Professional Integrity	the Use of Anticoagulant
Polymetalla Jakas E	Questioned by Ruling458	Drugs39
Bohmfalk, John F. The Modern Pharmaceu-	Rural Hospital Medical	L
The Modern Pharmaceu-	Records13	Lewis, Henry M., M.D.
tical Industry79, 228	The Doctor and the	Dermatitis of the Female
Bolton, W. W., M.D.	Veteran151	Hand
Health Education: The Doctor as a Teacher104	The Helping Hand402	Hand Lung Neoplasms from the
Doctor as a Teacher104	The Importance of Relaxation221	Endoscopist's Standpoint20
Bronchiectasis — Case Reports352 Brunsting, Louis A., M.D. Systemic Lunus	Relaxation221	Endoscopist's Standpoint20
Reports352	The Little Hoover	M
Brunsting, Louis A., M.D.	Commission Report114	Mayer, R. G., M.D.
Systemic Lupus	The Unhealthy Trend of	Presidential Address23
Systemic Lupus Erythematosus311 Buchanan, Robert	Health Insurance325	President's Page
buchanan, Robert	Tuberculosis Control and Case Finding360	12 37 72 113 14
Expansion Opportunities	Case Finding360	Minutes of Committee Meeting
For Your Drug Store448	Who Speaks for Doctors181	Meeting7
	Workmen's Compensation40	Minutes of Council Meeting _11
C,	Expansion Opportunities	Minutes of Medical School
<u>.</u>	For Your Drug Store448	Affairs Committee Meeting 11
Carcinoma of the Gall	_	Modern Drug Therapy40
Diaduel	F	Multiple Myeloma34
Carcinoma of the Vulva.	Father Time Presents the	Murdy, C. B., M.D.
Cervix and Endometrium 314	Medical Profession with	Colic or Catastrophe14
Cline, J. A., M.D.	a Problem1	Myers, J. Arthur, M.D.
Early Cholecystectomy in	Fodden, John H., M.D.	The Medical Profession and
the Treatment of Acute	Additionel Concepts in	Eradication of
Cholecystitis210	Diabetes Mellitus59	Eradication of Tuberculosis17 Myrabo, A. K., M.D.
Colic or Catastrophy144	Fuller, Neil, E.	Myrabo, A. K., M.D.
Congenital Hernia of the	Presidential Address286	Surgical Pathology in a Small General Hospital6
Diaphragm167 Cornely, John F., M.D.	Fultz, Virginia	Small General Hospital 6
Cornely, John F., M.D.	Why the Private Practice	
Colic or Catastrophe144	of Medicine Furnishes This	Mc M
Cottam, G. I. W., M.D.	Country with the Finest	McDonald, C. J., M.D.
Neurological Surgery by	Medical Care146	Voluntary Health
the General Surgeon139		Insurance35
Creevy, C. D., M.D.	G	McGreevy, E. J., M.D.
Diagnostic Techniques	Goodness, Joseph, H.	Carcinoma of the Gall
in Urology391	The Profession of Phar-	Bladder2
Current Status of Fair Trade	macy and the Food, Drug	McGreevy, J. V., M.D.
Laws341	and Cosmetic Laws414	Carcinoma of the Gall
	Gray, Howard, K., M.D.	Bladder2
D	Some Problems Associated	N
D	with Surgery of the	Neurological Surgery by the
Dakota Medicine Men176	Biliary Tract29	General Surgeon
Dermatitis of the Female	Gregg, John B., M.D.	General Surgeon13
Hand 8	Lung Neoplasms from the	P
Diagnostic Techniques	Endoscopists Standpoint203	Paul, W. D., M.D.
in Urology 391	Grollman, Arthur, M.D.	Penicillin and Its Problems 9
Differential Diagnosis and	Modern Drug Therapy400	Penicillin and Its Problems9
Treatment of Benign	Gross, G. C., Ph.D.	Practical Consideration in
Lesions at the Cardio-	Trends in Pharmaceutical	the Use of Anticoagulant
oconhagoal Tunation 202	Education 270	Drugg

Presidential Address239, 286
Presidential Address259, 200
President's Page
12, 37, 72, 113, 148, 179, 220, 323,
Psychological Essentials of General Practice98
Conoral Practice 98
General Flactice
S
Seibel, David S., M.D.
Carainama of the Vulva
Carcinoma of the varia,
Carcinoma of the Vulva, Cervix & Endometrium314 Some Basic Factors in the
Some Basic Factors in the
Production of Nervousiless 214
Some Problems Associated
'41 Coungary of the
Biliary Tract32 Spiry, A. W.
Chirt A W
President's Page 179, 220, 323,
President's rage 110, 220, 020,
439
Stanley, Arthur, M.D.
Stanley, Arthur, M.D. Bronchiectasis352 Stonington, Oliver G., M.D. Refrenneumoperitoneum
Stonington, Oliver G., M.D.
Retropneumoperitoneum
0 A . t
Diagnosis 53
Diagnosis
Stringer, C. J., W.D.
Diagnosis53 Stringer, C. J., M.D. Bronchiectasis352 Summers, John E., M.D. Bronchiectasis—Review
Summers, John E., M.D.
Bronchiectasis—Review
of Cases352
Surgical Pathology in a Small
of Cases352 Surgical Pathology in a Small General Hospital64
Stretomic Lilnie
Erythematosus311
T
The Legal Effect of the 1954
Amendment to Federal
Narcotic Law419 The Medical Profession &
The Medical Profession &
Tuberculosis 172
The Modern Pharmacoutical
Industry 79 228
Eradication of Tuberculosis172 The Modern Pharmaceutical Industry79, 228 The Profession of Pharmacy
The Profession of Pharmacy & the Food, Drug &
Cosmetic Laws414
Cosmetic Laws 414
The Retail Pharmacists &
The Retail Pharmacists & Public Relations 332
The Retail Pharmacists & Public Relations332 Transactions of the S. D.
The Retail Pharmacists & Public Relations332 Transactions of the S. D.
The Retail Pharmacists & Public Relations332 Transactions of the S. D.
The Retail Pharmacists & Public Relations332 Transactions of the S. D. State Medical Association249-278 Trends in Pharmaceutical
The Retail Pharmacists & Public Relations332 Transactions of the S. D. State Medical Association249-278 Trends in Pharmaceutical
The Retail Pharmacists & Public Relations332 Transactions of the S. D. State Medical Association249-278 Trends in Pharmaceutical
The Retail Pharmacists & Public Relations 332 Transactions of the S. D. State Medical Association 249-278 Trends in Pharmaceutical Education 379 Two Successful Hip Nailings
The Retail Pharmacists & Public Relations
The Retail Pharmacists & Public Relations
The Retail Pharmacists & Public Relations 332 Transactions of the S. D. State Medical Association 249-278 Trends in Pharmaceutical Education 379 Two Successful Hip Nailings in One Patient at Ages of 93 and 95 Years 431
The Retail Pharmacists & Public Relations 332 Transactions of the S. D. State Medical Association 249-278 Trends in Pharmaceutical Education 379 Two Successful Hip Nailings in One Patient at Ages of 93 and 95 Years 431 V Van Demark, Robert E., M.D.
The Retail Pharmacists & Public Relations 332 Transactions of the S. D. State Medical Association 249-278 Trends in Pharmaceutical Education 379 Two Successful Hip Nailings in One Patient at Ages of 93 and 95 Years 431 V Van Demark, Robert E., M.D. Two Successful Hip Nailings
The Retail Pharmacists & Public Relations
The Retail Pharmacists & Public Relations
The Retail Pharmacists & Public Relations 332 Transactions of the S. D. State Medical Association 249-278 Trends in Pharmaceutical Education 379 Two Successful Hip Nailings in One Patient at Ages of 93 and 95 Years 431 V Van Demark, Robert E., M.D. Two Successful Hip Nailings
The Retail Pharmacists & Public Relations

Future ----

(Continued from Page 450)

BUCHANAN PAPER-

Self-service is frowned upon in many states by the pharmacist group. I believe it is a trend that you cannot stop. People like to shop in self-service stores. While we do believe that you must maintain and supervise the sale of certain types of drugs, there are many items that can be placed on selfserve counters.

Remember, you are not alone. We have represented here in Aberdeen a number of pharmaceutical manufacturers. Those companies are constantly working in market and product research to make more sales for the independent druggist. We like to feel that the wholesaler is assisting, also. Every wholesaler is vitally interested in you people, because as you prosper, so does the wholesaler. We are all in this together.

....

WANTED: Young man with training or experience in obstetrics; some general practice necessary. Small, wellestablished clinic, early partnership through mutual agreement.

Write Lake Region Clinic

Devils Lake, North Dakota

The placement Service of the South Dakota State Medical Association receives frequent requests from Doctors looking for locations.

If you are looking for an associate or know of a good location, please drop a line to the Medical Association office.

supplemental ultraviolet therapy in the patient's home...a valuable adjunct in physical rehabilitation

The value of ultraviolet ancillary treatment in physical rehabilitation is generally recognized. For making up dietary deficiencies, increasing blood hemoglobin levels, improving the absorption of calcium, iron, nitrogen and phosphorus, and for many other bactericidal or therapeutic uses, proper exposure of the patient to ultraviolet has proved highly effective.

Busy physicians have found they can ease their schedules by prescribing home ultraviolet treatments. And the Hanovia Prescription Model Ultraviolet Quartz Lamp has been developed especially to deliver the most effective wavelengths in the stimulating portion of the ultraviolet spectrum, as shown in the chart.

For supplementary home treatments your patients can purchase Hanovia Prescription Model Ultraviolet Lamps on convenient payment terms. Write for literature.

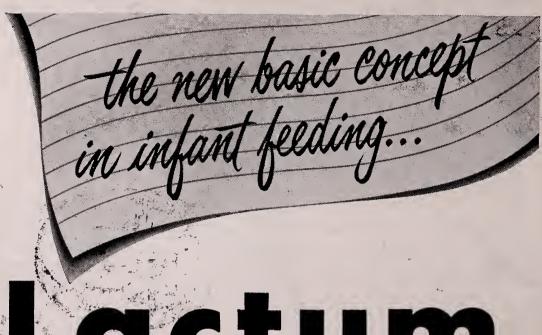


Physicians and Hospitals Supply Co., Inc.

1400 Harmon Place, Minneapolis 3, Minnesota

Gentlemen: Please send me literature on the Hanovia Prescription Model Ultraviolet Quartz Lamp.

CITY.....STATE......



Lactum

MEAD'S LIQUID FORMULA FOR INFANTS



Conforming in every respect to the latest and most scientific evidence on infant feeding, Lactum provides a clinically proved cow's milk formula, with demonstrated nutritional advantages, plus new convenience made possible by its ready-to-use liquid form.

Outstanding among Lactum's nutritional benefits is its generous milk protein content—providing a more-than-ample margin of safety above the Recommended Daily Allowance. Its natural milk fat not only supplies an effectively utilized source of calories but permits a uniformly smooth, perfectly homogenized formula. Supplementary carbohydrate (Dextri-Maltose) is incorporated for caloric adequacy and protein sparing.

Both in formulation and in manufacture, Lactum reflects Mead Johnson and Company's long experience in developing more effective products for infant feeding to meet the changing needs of the medical profession.

Lactum's time-saving convenience is welcomed by today's busy young mothers. They merely add 1 part Lactum to 1 part water for a formula supplying 20 calories per fluid ounce.







PUBLISHED MONTHLY BY THE SOUTH DAKOTA STATE MEDICAL ASSOCIATION AND

THE SOUTH DAKOTA PHARMACEUTICAL ASSOCIATION

DECEMBER ★ 1954



from the literature...



"The value of CHLOROMYCETIN in the treatment of infections due to most bacteria, the pathogenic rickettsiae, and many of the large viruses has now been well established." 1

in typhoid fever

"Our experience...and many others all show that chloramphenicol [CHLOROMYCETIN] has an established place in the treatment of typhoid fever."²



in meningitis

"At the present time chloramphenicol [CHLOROMYCETIN] is recognized as a potent antibiotic whose ease of administration and prompt diffusion into serum and spinal fluid makes it a particularly useful agent in the treatment of many forms of purulent meningitis." 3

Chlord

(1) Yow, E. M.; Taylor, F. M.; Hirsch, J.; Frankel, R. A., & Carnes, H. E.: J. Pediat. 42:151, 1953. (2) Dodd, K.: J. Arkansas M. Soc. 10:174, 1954. (3) Hanbery, J. W.: Neurology 4:301, 1954. (4) Miller, G.; Hansen, J. E., & Pollock, B. E.: Am. Heart J. 47:453, 1954. (5) Keefer, C. S., in Smith, A., & Wermer, P. L.: Modern Treatment, New York, Paul B. Hoeber, Inc., 1953, p. 65.





know that bloodpressure measurement is a sure and simple procedure with a Lifetime Baumanometer. With the KOMPAK Model in the bag they take laboratory accuracy with them wherever they go.

Price: \$39.50



in ward, clinic, Operating Room,

wherever bloodpressure is taken.

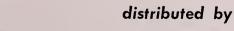
Economy-minded administrators all

standardize on the STANDBY

Model Baumanometer.

P.S.—busy doctors like the STANDBY Model for office use!

Price: \$57.50



PHYSICIANS AND HOSPITALS SUPPLY CO.

1400 Harmon Place, Minneapolis 3, Minn.

A protein margin of safety



- for greater nitrogen retention
- for firmer muscle mass

LACTUM

NUTRITIONALLY SOUND FORMULA FOR INFANTS

In the bottle-fed infant, a higher protein intake, with greater nitrogen retention, results in firmer muscle mass, better tissue turgor and better motor development. A protein intake that does not maintain positive nitrogen balance "cannot be considered optimal or even safe for any length of time."

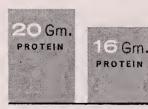
During the first year of life, the infant's nourishment is derived primarily from his formula. Hence it is especially important that the formula be generous in protein. The usual Lactum® feedings provide 2 Gm. protein per pound of body weight—25% more than the Recommended Daily Allowance of 1.6 Gm. per pound (3.5 Gm. per kilogram).

1. Jeans, P. C., in A.M.A. Handbook of Nutrition, Philadelphia, Blakiston, 1951, pp. 275-298. 2. Stare, F. J., and Davidson, C. S., in The Proteins, American Medical Association, 1945.



POWDERED







Recommended
Daily Allowance







COLLEGE OF PHYSICIAN.

This Book is due on the last date stamped below. No further preliminary notice will be sent. Requests for renewals must be made on or before the date of expiration.

DUE RETURNED 1955

A fine of twenty-five cents will be charged for each week or fraction of a week the book is retained without the Library's authorization.

